

# LIFE

AMERICA'S  
FUTURE



JUNE 5, 1939 10 CENTS

**"I'VE PICKED A  
SMART LORD ELGIN FOR MY  
GRADUATION WATCH"**

Says LEWIS WARRINGTON BALDWIN, JR.,  
*Princeton '39*



● Princeton oarsman—a manager of the Triangle Club—president of Cottage Club, Lewis Baldwin of St. Louis has been one of the outstanding members of the Class of 1939. ELGIN has been his family's traditional watch.

MANY GRADUATION MODELS  
\$2475 AND UP

In celebration of ELGIN's 75th Anniversary, the Elgin Watch Building has been erected at the New York World's Fair. Visit this exciting exhibit and see time taken directly from the stars.



**SMART LORD ELGIN**  
chosen by Lewis Baldwin as his graduation watch. Unusually trim and modern in design, 21 jewels. Offers true, star-timed accuracy. Ask for No. 2869. \$50.00.

**Lord Elgin—the perfect remembrance. Choose one for your graduate now!**

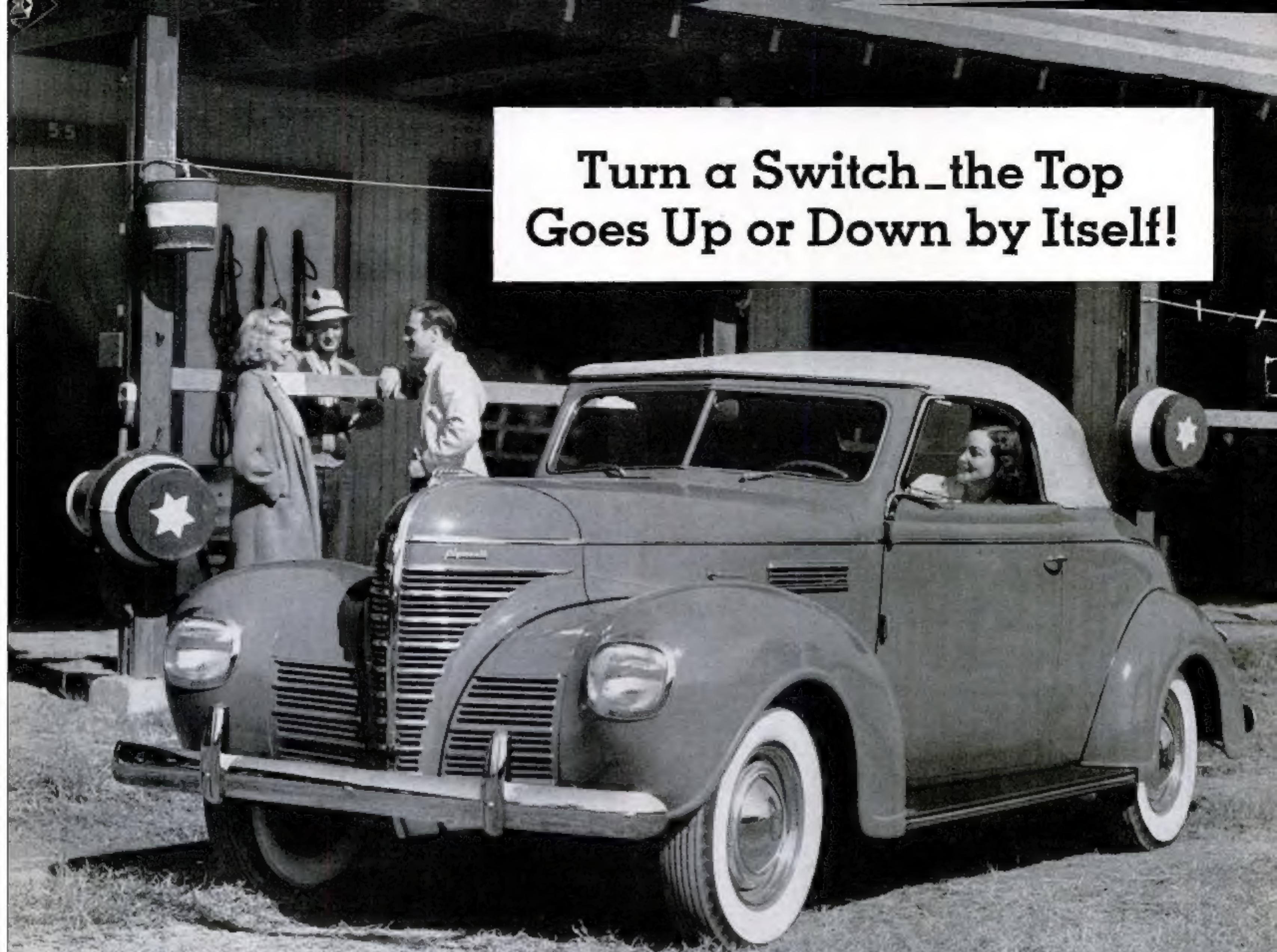
Fortunate graduates of '39! For this month the famous 21-jewel Lord Elgin and 19-jewel Lady Elgin watches at your ELGIN jeweler's offer a finer selection than ever.

See these spirited watches now! Styled with smartness and a sureness of design that sets them apart from all other makes.

Such timepieces are made possible only by ELGIN'S unique partnership of American craftsmen and scientists.



# Turn a Switch—the Top Goes Up or Down by Itself!



## **BIGGEST AND SMARTEST OF LEADING LOW-PRICED CARS—Plymouth is also the Best Buy!**

IT'S ANOTHER "FIRST" for Plymouth—a convertible coupe with *power-operated* top...one more reason for Plymouth's tremendous popularity!

And look at all the *extra* value that low Plymouth price brings you! The flashing performance of a big "L-head" engine...outstanding economy...the ride smoothness of Amola Steel coil springs...the safety of time-proven hydraulic brakes!

Get the thrill of driving a Plymouth...today!

■ Of leading low-priced cars, Plymouth is the roomiest, *biggest*—5 inches longer than one; 6 inches longer than the other!

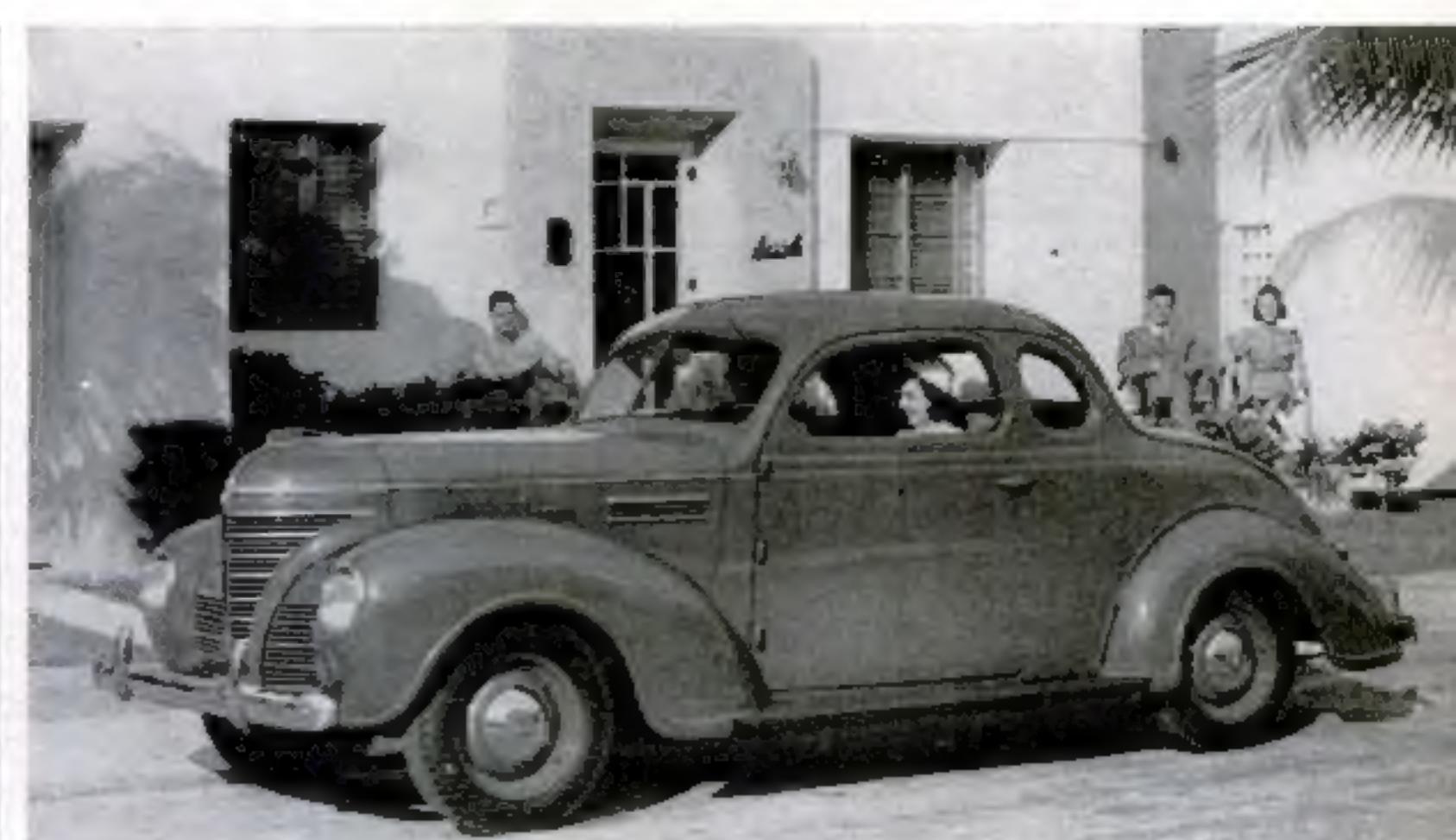
■ It's the only one of "All Three" low-priced cars with steering-post gear shift as standard on De Luxe models at *no extra cost*.

■ And Plymouth is the only low-priced car with the matchless ride of independent front coil springs as standard equipment on *all models*.



**THIS \$685  
SEDAN**

—DELIVERED IN DETROIT. Plymouth prices include all federal taxes. State, local taxes, if any, and transportation not included. Before you buy *any* car, see what Plymouth gives you—in luxury, handling ease and great engineering features.



**THIS \$645  
COUPE**

—DELIVERED IN DETROIT. You'll find your present car will probably represent a large proportion of Plymouth's low delivered price...balance in low monthly instalments. PLYMOUTH DIVISION OF CHRYSLER CORPORATION, Detroit, Michigan.

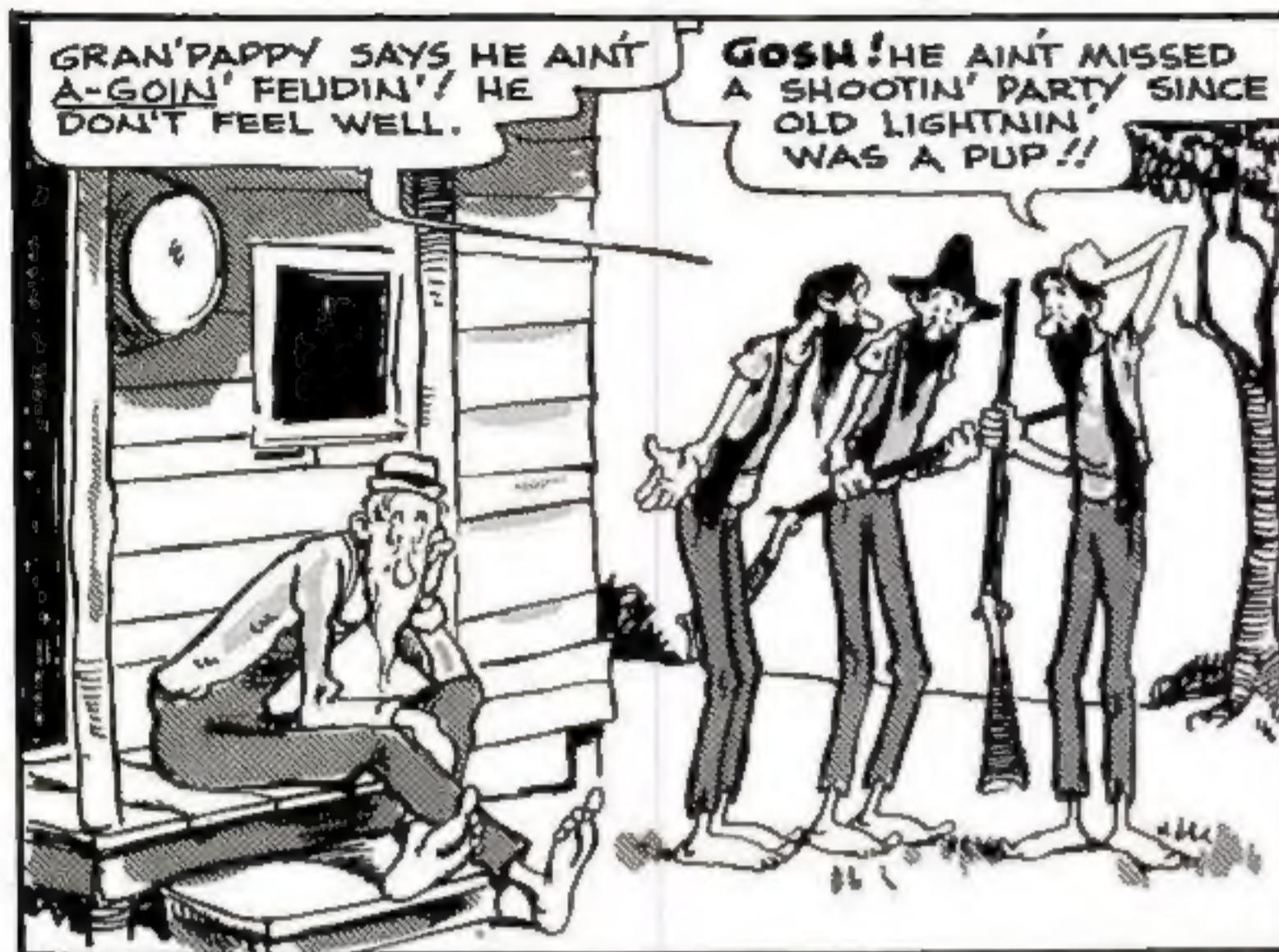
# PLYMOUTH BUILDS GREAT CARS

THE "ROADKING"  
THE "DE LUXE"

Copyright © 1940

## THE MOUNTAIN BOYS

by PAUL WEBB



### BACK FROM THE RAID.

LOOK HERE, GRAN'PAPPY, WHAT WE-U'S SNITCHED FROM THE TOLLIVER BOYS—KELLOGG'S ALL-BRAN! FOLKS SAY YOU EAT IT TO JINE THE REGULARS. WONDER EF THAT MEANS IT WOULD HALP YORE CONSTIPATION?

SHO'! AH COULD GO FER THESE VITTELS EV'R'MANNIN'! TOO GOOD FER THEM TOLLIVERS!!

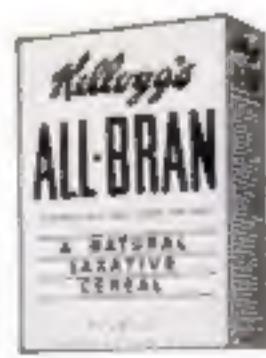
DUNK IT IN THE MILK, GRAN'PAPPY! AN' YOU ORTA DRINK PLENTY O' WATER.



### THE NEXT FEUDIN' PARTY



YES, folks, the modern idea about constipation is not to bear it first and try to cure it later. If it's the ordinary kind (due to lack of "bulk" in the diet), the better way is to prevent it by getting at its cause. How? Eat a crisp, bulk-rich cereal—Kellogg's All-Bran. Eat it daily, drink plenty of water, and join the "Regulars!" Made by Kellogg's in Battle Creek.



**Join the "Regulars" with KELLOGG'S ALL-BRAN**

## LETTERS TO THE EDITORS

### Help! Help!

Sirs:

I've turned to page 44 of the May 15 issue at least five times to assure myself I hadn't missed a page. For shame, LIFE! Here I plan a three-day beauty treatment, I follow directions carefully for two days and on the third I find myself left with a yeast cake and an egg. Do I eat the yeast cake? Do I fry the egg?

DORINDA SHERMAN

Norwich, Conn.

Sirs:

Help! Help! Here I am with my face a palpitating blob (from repeated steaming and citric-acid applications) and with two raw eggs and a couple of cakes of yeast in my hands.

What do I do next? It's a dirty trick to leave a lady two-thirds through a beauty treatment—like abandoning a man with half of his face shaved.

D. STEWART

Independence, Kan.

• In future LIFE will know better than to leave beauty treatments unfinished. The third-day treatment follows:

Clean face with the brush and soap; repeat steaming process with camphor ice in water; make a paste of the yeast cake and egg-whites and spread it over face and neck for a half-hour, then remove with warm water; follow with lemon juice and cream.—ED.

### "Ivory-Tower Editors"

Sirs:

As readers of LIFE our staff is very much impressed with the anti-Labor bias of LIFE's ivory-tower editors. Why must your captions in the coal-lockout pictures in the May 22 issue be titled: "John L. Lewis wins a big victory but strike-torn Labor loses public sympathy"?

The United Mine Workers of America is 50 years old. The miners are its members because it is their patron saint and defender of their right to live. The miners who spend their lives in danger and hard labor long ago learned the meaning of unity. It is not the miners who fight jurisdictional claims. It is the mine owner, backed by bankers and other die-hard open-shoppers who want to wreck Labor's hard-won gains by striking at the Miners Union first.

But irrespective of a hostile press, American Labor, organized and unorganized, is solidly for the miners, who in many respects are looked upon by the workers as the heroes of American Labor.

If LIFE thinks that Labor's major interest is jurisdictional disputes, why does not LIFE do a real job on Labor by sending staff photographers into steel towns like Johnstown, Bethlehem, Sparrows Point, Steelton and Lackawanna where Labor is still fighting for recognition. Let the American people see where and how the workers live. See the utter waste of human life. See the future generation growing up, emaciated, in rags, all but homeless, while a benevolent government pours hundreds of millions in government contracts into a corporation's coffers whose leaders are corrupt and contented

in the face of human misery for which they are almost solely responsible. And if the people of America don't sicken at the sight and sound of it and don't blush at the shame of it, then common decency must have vanished from the land.

E. J. LEVER  
Field Director

Steel Workers Organizing Committee  
Bethlehem, Pa.

• LIFE did not condemn John L. Lewis' stand on the miners' contracts, but simply stated the fact, now abundantly clear, that Labor has lost much of the public sympathy it enjoyed up to two years ago. Both the FORTUNE and Gallup polls have shown this loss of sympathy. As for the steelworkers, LIFE covered them thoroughly when the organizing drive was at its height (March 15, 1937) and will gladly accept Mr. Lever's invitation when the news warrants covering them again.—ED.

### Two Too Many

Sirs:

In your issue of May 15 there appeared a picture by Edward Laning, namely, T. R. in Panama. The flag in the picture



ARTIST LANING'S FLAG

has 13 stripes next to the union and 15 at the edge farthest from the union as shown in the accompanying illustration (see cut).

ALAN P. JONES JR.

Fort Atkinson, Wis.

• Mr. Laning says he put in the two extra stripes by mistake.—ED.

### T. R.'s Shovel Engineers

Sirs:

Re your article in LIFE, May 15, on T. R. in Panama:

It might interest you and your readers to know that the steam-shovel engineer who had the placard "WE WILL DO OUR PART TO HELP YOU DIG IT" is still alive and going strong. He is the writer of this letter, J. Q. Laufer of Waverly, Iowa.

Mr. Roosevelt had the train stop when he saw the sign, came onto the shovel and had us dig several shovels of dirt, throwing same from one side of the ditch to the other. That evening there was a gathering at Colon and again Mr. Roosevelt called for the crew of the shovel and we went onto the platform. Mr. Roosevelt issued badges made out of various French machines that were rotting in the jungles.

J. Q. LAUER  
Waverly, Iowa.

(continued on p. 4)

## YOUR ADDRESS?

IS the address to which this copy of LIFE was mailed correct for all near future issues? If not, please fill in this coupon and mail it to LIFE, 330 E. 22nd Street, Chicago, Illinois.

**Effective \_\_\_\_\_ DATE \_\_\_\_\_** my mailing address for LIFE will be

### NEW ADDRESS

Name \_\_\_\_\_

PLEASE PRINT \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_



# Ipana asks—Are you mentally and dentally Alert?

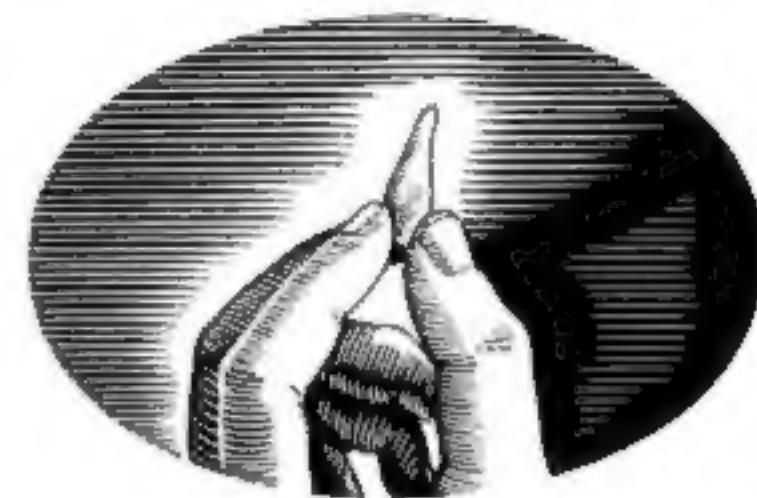
IF YOU can pick the correct ending for each of the five unfinished sentences, you've a sound working knowledge of dental hygiene. (Only one ending in each group of four is correct.) Do your best—every answer is important to your TEETH and GUMS.



"Pink tooth brush" is a warning that ought to be heeded without delay. Most likely, it indicates that

- A. your gums need exercise, stimulation.
- B. your gums are much too hard.
- C. you're getting color blind.
- D. you have a sweet tooth.

That tinge of "pink" on your tooth brush may be a forecast of dental trouble to come. More likely, however, it simply means your gums have grown weak from lack of exercise. Often your dentist will prescribe "the healthful stimulation of Ipana and massage." In any case, he is the one to decide. "A" is the correct ending.



If you "gave an eye tooth for something", you'd part with a tooth known in dental parlance as

- A. an 8-year molar.
- B. the solar plexus.
- C. a canine tooth.
- D. dolce far niente.

Your so-called "eye" teeth—the large-crowned, pointed, almost peg-shaped teeth at the sides of the four sharp incisors in the front of your mouth—are usually known in dental circles as the *canine teeth*. Normally, there are two canine or "eye" teeth in the upper jaw and two more in the lower. "C" is the correct answer.



Today, in many schools throughout the country, children are being instructed in the healthful exercise of

- A. the Infantry Drill Manual.
- B. gum massage.
- C. jiu jitsu.
- D. the 2-mile run.

Thanks to health-minded teachers, dental drills have become a part of the course in many schools. Regularly—in their classrooms—children are being taught the importance of gum massage to firm, healthy gums... the importance of firm, healthy gums to clean, sound teeth! "B" is the correct ending.



The overwhelming weight of evidence indicates that

- A. all adult teeth have three roots.
- B. the whitish outside coating of a tooth is called dentine.
- C. gingivitis comes from eating too much ginger.
- D. hard-to-chew foods are better for teeth and gums than soft foods.

Hard, tough foods give gums the exercise they need for firmness and health—soft, creamy, well-cooked dishes do not. Enjoy our modern soft-food menus—but do as many dentists advise—massage your gums regularly with Ipana Tooth Paste to provide them with needed stimulation. "D" is the correct ending.



One outstanding reason for Ipana's great popularity is that Ipana Tooth Paste, with massage, is especially designed to

- A. help your gums as well as your teeth.
- B. make your teeth exactly like pearls.
- C. supply you with vitamins A, C, D, and E.
- D. adhere to your tooth brush bristles.

Massaged into the gums with fingertip or tooth brush, Ipana awakens vigorous circulation in the gums—helps stimulate them to new firmness and health. This aid, in addition to Ipana's famous tooth-cleaning action—is one of the outstanding reasons for its widespread popularity. "A" is the correct ending.



ASK YOUR OWN DENTIST about Ipana. And buy a tube of economical Ipana Tooth Paste today at your druggist's. For a bright, winning smile, make Ipana and massage part of your everyday dental ritual!

## IPANA TOOTH PASTE

This One



HB5A-ENU-6S16

# Is your dog always scratching?

Skin irritation, excess shedding and other common ailments usually due to faulty diet . . . these troubles unknown among 230 dogs raised by Swift on exclusive diet of PARDI



● In an unprecedented test at Swift's Research Kennels, 4 consecutive generations of pedigreed dogs have been raised on an exclusive diet of Pard and water. Growth, conformation to breed, and general health of the 230 dogs have been well above normal!

And from this great feeding experiment comes a most significant clue to your own dog's health. Not a single one of these Pard-fed dogs has ever suffered from excessive shedding, dietary skin irritation, listlessness, loss of appetite—or any of the other common ailments which leading veterinarians say are largely caused by faulty feeding!

EVERY CAN of Pard contains the food elements your dog needs! It is nutritionally balanced . . . and its uniformity is checked scientifically. Pard-fed dogs in Swift's Research Kennels are frequently examined for vitamin and mineral sufficiency.

To prevent these troubles, many veterinarians urge Pard feeding. Put your dog on Pard now, to keep him permanently healthy and happy!

HIT-OR-MISS FEEDING CONDEMNED BY MANY LEADING VETERINARIANS. RECOMMEND PARD. Dr. V. M. H. . . . of Illinois, says: "Nervousness, excessive shedding, and skin irritations are, in 9 cases out of 10, caused by malnutrition due to hit-or-miss feeding." In such cases, Dr. H. . . . recommends Pard exclusively.

A SWIFT & COMPANY PRODUCT



**PARD** . . . SWIFT'S NUTRITIONALLY BALANCED DOG FOOD

## LETTERS TO THE EDITORS

(continued)

### The Lindberghs

Sirs:

I have read with much satisfaction your statement in regard to the photographs taken on the ship of Anne Lindbergh and her two children and I am sure that hundreds of others in this country will commend you highly for taking the attitude you did. Most of us feel that it is not fair to the Lindbergh family to have them persecuted by any sort of publicity in connection with their private lives. Of course it is another matter when they are commented upon on their professional activities, such as Anne Lindbergh's books, etc.

MRS. HENRY P. DAVISON  
Locust Valley, N. Y.

### Wrong Pigeon

Sirs:

In your May 15 issue you say: "Incontinent slaughter annihilated the heath hen and carrier pigeon."

Are you sure it is the carrier pigeon that is extinct?

C. H. WOODWORTH  
Indianapolis, Ind.

Sirs:

Incontinent slaughter may have annihilated the heath hen, but you will have to take the blame for carrying off the carrier pigeon.

E. E. HARTWELL  
Denver, Colo.

● LIFE slipped. It is the passenger pigeon that is extinct.—ED.

### King's Rent

Sirs:

A Picture to the Editors in the May 15 issue depicts the "rent" which the Hudson's Bay Company will pay on May 24, in accordance with the terms of the original charter.

You say this will be the first time the rent has been paid, as George VI is the first King of England to visit Canada.

George VI is the first reigning monarch to visit Canada, but the Company's Royal Charter, granted in 1670, states the rent is payable to Charles II, his heirs and successors; and it was paid to the Duke of Windsor when, as Prince of Wales, he visited Western Canada.

Even at that, two rent days in 200 years must be a record of some kind!

D. R. KENNEDY  
Montreal, Canada

Sirs:

Your correspondent, Mr. Frank Ryan of the Hudson's Bay Company, gives his address as Winnipeg, Ont. I think it advisable at this time that you inform the King that he should look for Winnipeg in Manitoba at the junction of the Red and Assiniboine Rivers. I'd hate to see the King walking thru the wilds of Ontario looking for Winnipeg and his pelts.

HARRY POWELL  
HARVEY ORR  
San Francisco, Calif.

Sirs:

Finding an error in LIFE is like finding an error in the dictionary.

Winnipeg is still in Manitoba.  
ROSS C. MERRETT  
Winnipeg, Manitoba

● LIFE, not Mr. Ryan, was responsible for placing Winnipeg in the wrong province.—ED.

### Saito's Ashes

Sirs:

TIME says, "The frail body of Hiroi Saito . . . arrived in state on the U. S. cruiser Astoria."

LIFE (May 22) says, "Into the harbor of Yokohama on April 17 steamed the U. S. cruiser Astoria, bearing the ashes

(continued on p. 6)

## BE KIND TO YOUR EYES

Test the Goggles You Buy!

You can't be blamed for taking chances on some things in life, but why risk your eyes . . . you'll never get a new pair. Take goggles for instance. Many seem harmless, yet are so out of focus they impair vision. Be kind to your eyes! Test the goggles you buy. OPTIKS are scientifically tested for true focusing before leaving factory. OPTIKS are furnished with genuine ground and polished sun lenses.

OPTIKS are made in the newest attractive frames—cost only 50c a pair. OPTIKS are on sale at leading stores. If dealer cannot supply you, send us 50c (stamps or coin).

LAPIN PRODUCTS INC.  
200 Varick St., New York

(In Canada 750—Canadian Lapin Products, Ltd., 49 Wellington St., West Toronto, Ontario.)

### MAKE THIS TEST

Focus glasses on target on right. Move glasses up and down. If circle moves with hand motion, lenses will distort your good vision. With OPTIKS circle remains stationary, which indicates no distortion or other dangers to good vision.



If they're OPTIKS they're tested



**PARD** . . . SWIFT'S NUTRITIONALLY BALANCED DOG FOOD

# ONE-SIXTH OF A NATION BLOWING AWAY!

Incredible? Government surveys show that one-sixth of our nation's precious soil is subject to wind erosion... and another sixth to gully erosion!

To check this, and to provide a broad program of soil conservation, the nation spent\* over 300 million dollars last year. A huge sum? Yes... but less than beer's taxes!

...AND BEER TAXES (*a million dollars a day!*) COULD PAY FOR SAVING IT

\*The Official Treasury Report shows Federal Expenditures of \$303,852,184.12 under Soil Conservation & Domestic Allotment Act for fiscal year 1938, plus \$26,973,910.62 spent through the Soil Conservation Service.

Over \$400 million in taxes contributed yearly to the cost of government. And over 1 million new jobs made by beer. And a new hundred million dollar market for three million acres of farm crops.

*And six years ago, nothing!*

Six years ago, nothing. Today, beer's tremendous benefits help millions of human beings—farmers, workers, taxpayers.

Are beer's benefits here to stay?

It depends. It depends, brewers realize very well, on keeping the character of beer retailing as wholesome as that of beer itself.

By and large, beer retailing is in the hands of responsible, respectable citizens who know their obligation to other families as well as to

their own. As to the brewers themselves: They know, selfishly, if for no other reason, that it is to *their own* interests to be first to help correct any conditions that offend anyone, beer consumer or not. (*If you remember nothing else about this advertisement, please remember that!*)

#### The campaign begins

Brewers, of course, cannot enforce laws. But, beginning in certain typically American test communities, they have been working out a program to "clean up or close up" offending retail outlets—in conjunction with local law-

enforcement authorities. The plan is one of strict local self-regulation. We believe it holds great promise.

We plan to extend it gradually, yet widely; a few states this year, a few more states next year, as our facilities permit.

We'd like you to know more about it.

*Sent FREE on Request:*  
*A booklet that describes how the brewers' self-regulatory program is functioning.*

*Address: United Brewers Industrial Foundation, 21 East 40th Street, New York, N. Y. (Dept. A4).*



*Beer... a Beverage of Moderation*

# NO LEGISLATION NEEDED FOR THIS \$200-A-MONTH SOCIAL SECURITY



**Just 2 men** out of the average 100—including many who have earned large salaries—reach 65 with enough money to retire and be independent. Recently-enacted laws promise small pensions to many of the other 98%. But thoughtful fathers—men who are determined to be "well fixed" (see above) so they can really enjoy life—are putting a modest yearly amount into a practical new insurance plan called "COMPLETE PROTECTION." Unique value of this plan: it protects fathers—and their families too! If the fathers live to 60 or 65, they receive \$200 every month for life. If they die early, the plan provides \$200 every month for 20 years to bring up their children in comfort (see below)—then adds a generous annuity for the mother. For full, interesting details on "Complete Protection," send your name and address on a postcard to The Union Central Life Insurance Company, Dept. B-2, Cincinnati, Ohio—a 71-year-old, \$300,000,000 institution.



Copyright 1939 by The Union Central Life Insurance Co.

**THE UNION CENTRAL LIFE INSURANCE CO.**

## LETTERS TO THE EDITORS (continued)

of the late Ambassador Hiroshi Saito home to Japan."

I think LIFE is right. Yes?

H. S. JOHNSON  
The Connecticut College of Pharmacy  
New Haven, Conn.

• Yes.—ED.

### Child Adoption

Sirs:

I read with interest the article on adopting children, in your May 15 issue.

My wife and I have tried for years to adopt another child. We adopted a boy, now 8 years old, and a girl who would be 4 but we lost her two years ago in an automobile accident.

I am just a linotype operator and you of course know I am not wealthy (far from it) but we could give a child a good home and lots of affection, which I think is very important.

A "Child Adoption Administration" to my mind would do more good for the country than a lot of the present alphabetical setups.

OTTO H. CRAWFORD  
Sault Ste. Marie, Mich.

• Many States have adoption agencies similar to the excellent Adoption Committee of the State Charities Aid Association in New York, which helped LIFE in the preparation of its story.—ED.

Sirs:

The enclosed picture of a little girl in your recent article on adopting children has a resemblance to our family characteristics and would fit in well to balance up a family of two boys and one girl.

(Name Withheld)



FAVORITE CHILD

Sirs:

Would you kindly tell me where I may obtain information concerning the blonde little girl in the bottom row, page 58.

(Name Withheld)

Sirs:

Who is the cute little boy in the second row, third from top, on page 58? He took my eye every time I've opened this week's LIFE.

JAMES FARRELL  
Gardena, Calif.

Sirs:

I am interested in learning the whereabouts of the boy wearing the cap on page 59.

MRS. R. S. H.  
Peekskill, N.Y.

• LIFE had many inquiries from prospective foster parents about the children pictured. Most popular was the little girl whose picture appears above. It so happens that she is one of the three children shown who are not up for adoption since one of her parents retains guardianship.—ED.

MY DEAR FELLOW—  
YOU'VE NEVER  
HAD A GUINNESS  
AFTER GOLF?



## Enjoy the most popular After-Exercise Brew in the World!

IT'S TRUE—more people enjoy Guinness than any other brew on earth! Try a Guinness after your next golf match and you'll see why. Guinness' flavor is robust and hearty—a clean, bracing tang that tastes great after exercise.

Guinness is just as welcome before or with meals, when tired or at bedtime. If you have never had a Guinness—or if you have tried it only "Half and Half" with lighter brews—enjoy a Guinness, straight, today!

GUINNESS STOUT has been brewed in Dublin, Ireland, since 1759. It is made from barley malt, hops, special Guinness yeast, County Kildare spring water—nothing else. It matures over a year in oak vats and in bottle until consumed. Like draught beer, Guinness is not pasteurized. Nor is it filtered—it thus contains active yeast...all its natural goodness!



## GUINNESS IS GOOD FOR YOU

*Sole Distributors for U.S.A., W. A. Taylor & Company, 15 Laight Street, New York.*  
*FREE: Story of Guinness since 1759, 66 pages, 44 pictures. Write American Representative, A. Guinness, Son & Co., Ltd., Dept. X-186, 501 Fifth Avenue, New York.*



### GOOD RIDDANCE, I SAY!

Those pans, I mean. If Anne hadn't got married you'd have gone on using them forever. Let's look at the rest!\*

## New Brides and Old deserve the Best ALUMINUM COOKING UTENSILS

### WHAT TO LOOK FOR:

#### \*HANDY POT 'N' PAN CHECK LIST!

Sizes:  Too few  Too small  Too large.

How they heat:  Too slow, waste fuel.

Too fast, burn food.

Convenience:  Heavy to lift  Awkward to handle.

General condition:  Worn  Battered  Broken.

Bottoms:  Bulged, wobbly.

Handles:  Uncomfortable  Loose  Get too hot.

Knobs:  Loose  Broken  Get too hot.

Lids:  Too few  Out of shape.

Cleaning:  Unsanitary seams, crevices.

How do your pots and pans pass this inspection?

### WHAT TO DO NEXT!

Bring your kitchen up-to-date with modern Wear-Ever Aluminum Cooking Utensils. When you buy look for the Wear-Ever trade-mark on each utensil. For 39 years it has guided housewives to "Aluminum at its best." If you do not know where to buy Wear-Ever, write The Aluminum Cooking Utensil Company, 1506 Wear-Ever Building, New Kensington, Pa.



Cooking utensils are your most important household equipment. To them you entrust all the food values you purchase so carefully. They determine how economically fuel is used.

Look honestly at your own pots and pans. Use the chart\* printed for your convenience, and see if you are giving yourself, your family, and your pocketbook a square deal.



**FOR FLAVOR** — Aluminum, the metal that is friendly to food, keeps food flavors natural. Foods look better, taste better because they cook evenly in Aluminum.



**FOR HEALTH** — The natural goodness—the minerals, the vitamins, the purity, are preserved in Aluminum. Full food value and full flavor make for appetites and health.



**FOR ECONOMY** — Nature made Aluminum a better heat conductor than other metals practical for cooking. Heat spreads faster, cooks evenly, uses less fuel. No food spoiled.

**"Wear-Ever"**  
*Aluminum at its Best*

# SPEAKING OF PICTURES . . .

## ...COMIC STRIPS ARE AMERICA'S FAVORITE FICTION



The "comic strip" is misnamed. It started that way but today most of the strips are straight serial fiction—shorthand novels. They are read daily by virtually the entire population of the United States.

The strips have enriched our language (foo, twerp, bodacious, discombobulate), our song (*Barney Google with his Goo-Goo-Gooey Eyes*), and our drama (they fathered the movie cartoon). All the strips are aimed

at lowbrows but some have won highbrow acclaim (*Krazy Kat*, *The Hungry, Moon Mullins*). A few are admired for their art work (*Terry, Skippy, Betty*)

The strip is a strictly American art form. American strips are printed all over the world in every language, spreading American humor and their special concept of American life. Spanish warplanes fought under the insignia of Popeye.

Life in the strips bears little relation to reality. But to many of their followers the people of the strips are completely real. Their triumphs and troubles are shared. When Mary Gold died a nation mourned. When Little Orphan Annie lost her dog, Henry Ford wired: "Please make every effort to find Sandy." So close do readers feel to their favorites that they write to ask where Tarzan lives. They want to join him.



# I Found Out How to Get the Quickest Non-Skid Stops

A SIMPLE TEST INTRODUCED  
ME TO A NEW KIND OF TIRE  
THAT SWEEPS WET ROADS SO  
DRY YOU CAN LIGHT A  
MATCH ON ITS TRACK!



## READ HOW THIS NEW GOODRICH TIRE GIVES YOU TWO GREAT LIFE-SAVING FEATURES AT NO EXTRA COST!

WET, slippery roads. Bad going "underneath." Sudden emergencies where the difference between a quick stop and a car-spinning skid might easily be the difference between safety and tragedy for your family. Those are the spots when you'll be mighty thankful for the protection you get from the new Goodrich Silvertown Tire.

Note the specially designed deep-grooved tread. It's *broader, flatter, deeper*—gives you maximum contact with every type of road. It's called the Life-Saver

Tread because that's what it is—a life-saver!

Those never-ending spiral bars that you see act like a rapid-fire series of windshield wipers—sweep water right and left with every turn of your wheel. Instead of a "skid trap" under your car there's a DRY TRACK for the rubber to grip. And you can prove that it's dry by *lighting a match on it*.

This new skid-protected Silvertown also gives you the famous Golden Ply blow-out protection. Thus, you are safe-guarded two important ways—against both skids and blow-outs. And this vital protection plus months of extra mileage and new streamlined beauty is yours AT NO EXTRA COST!

### Long Easy Terms! Pay As You Ride!

For your convenience a liberal Budget Plan is available at Goodrich Silvertown Stores and many Goodrich Dealers. Regardless of your income, you can use this modern way to buy and pay on your own long, easy terms. No red tape or credit detail. Remember, for safety tomorrow, get Silvertowns today!

### ★ GOING TO THE FAIR? ★

See Jimmie Lynch and his Death  
Dodgers in daredevil demonstra-  
tions at Goodrich Thrill Areas  
at New York.

Don't miss the striking Good-  
rich Exhibit "What's New in  
the World of Rubber" at San  
Francisco.

### HERE'S THE PROOF that Silvertowns are "tops" for Quick Non-Skid Stops

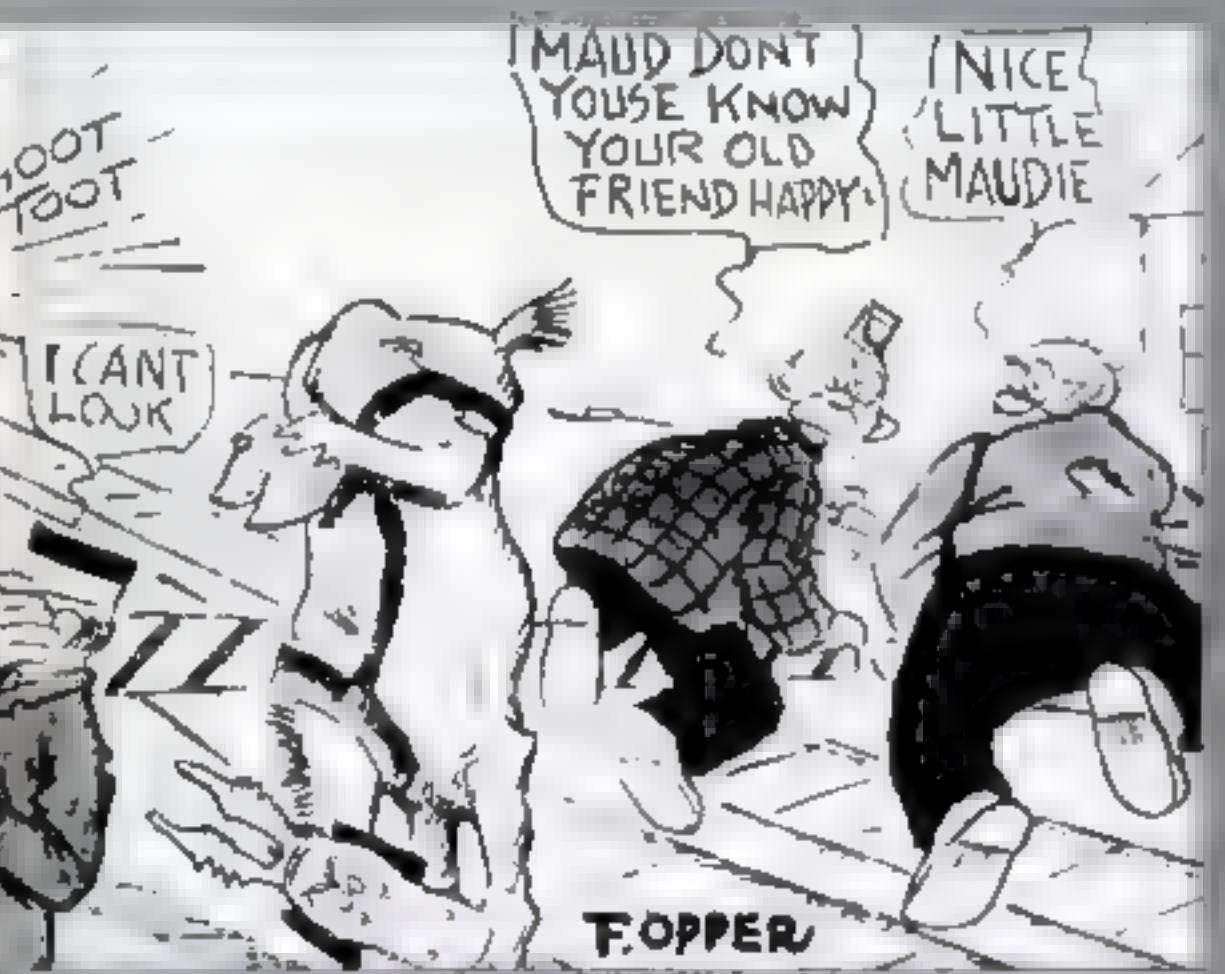
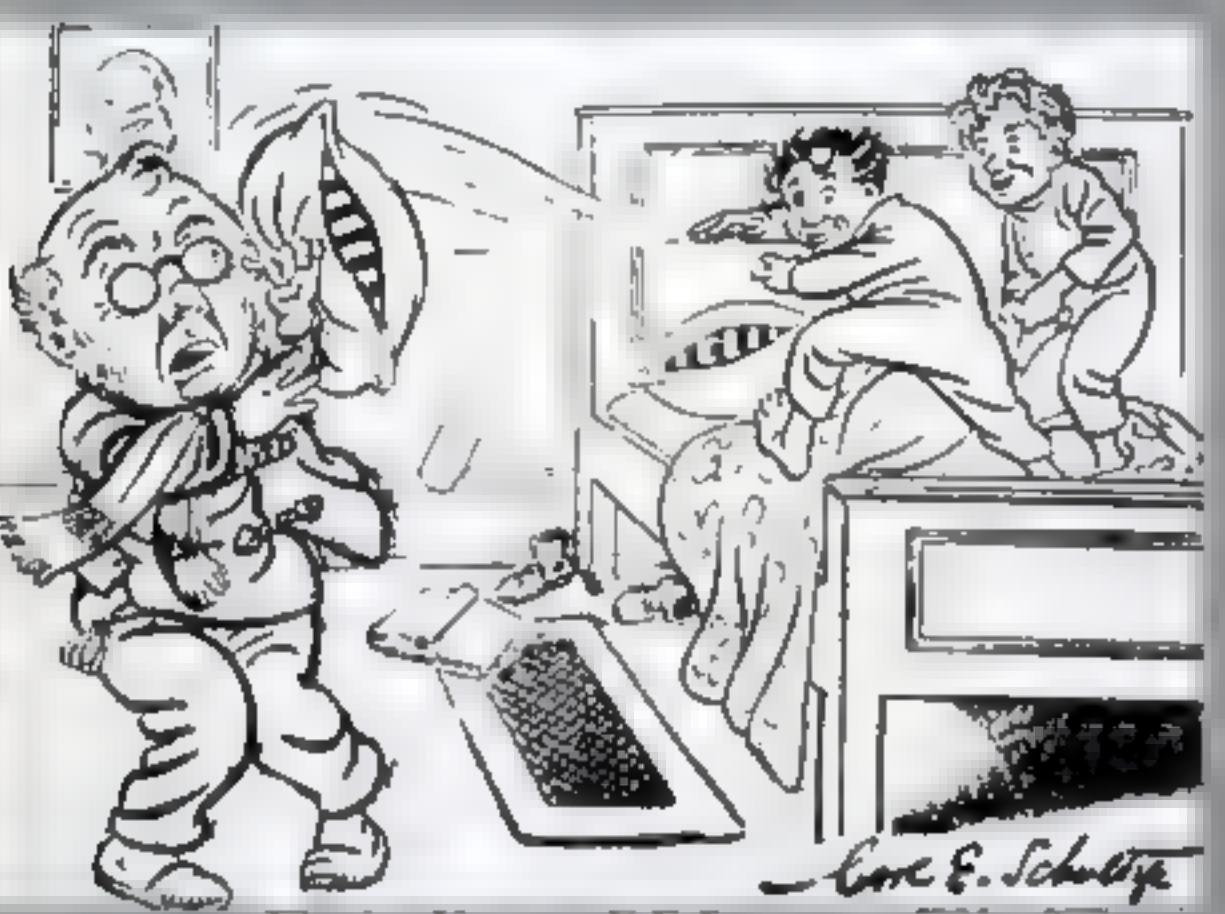
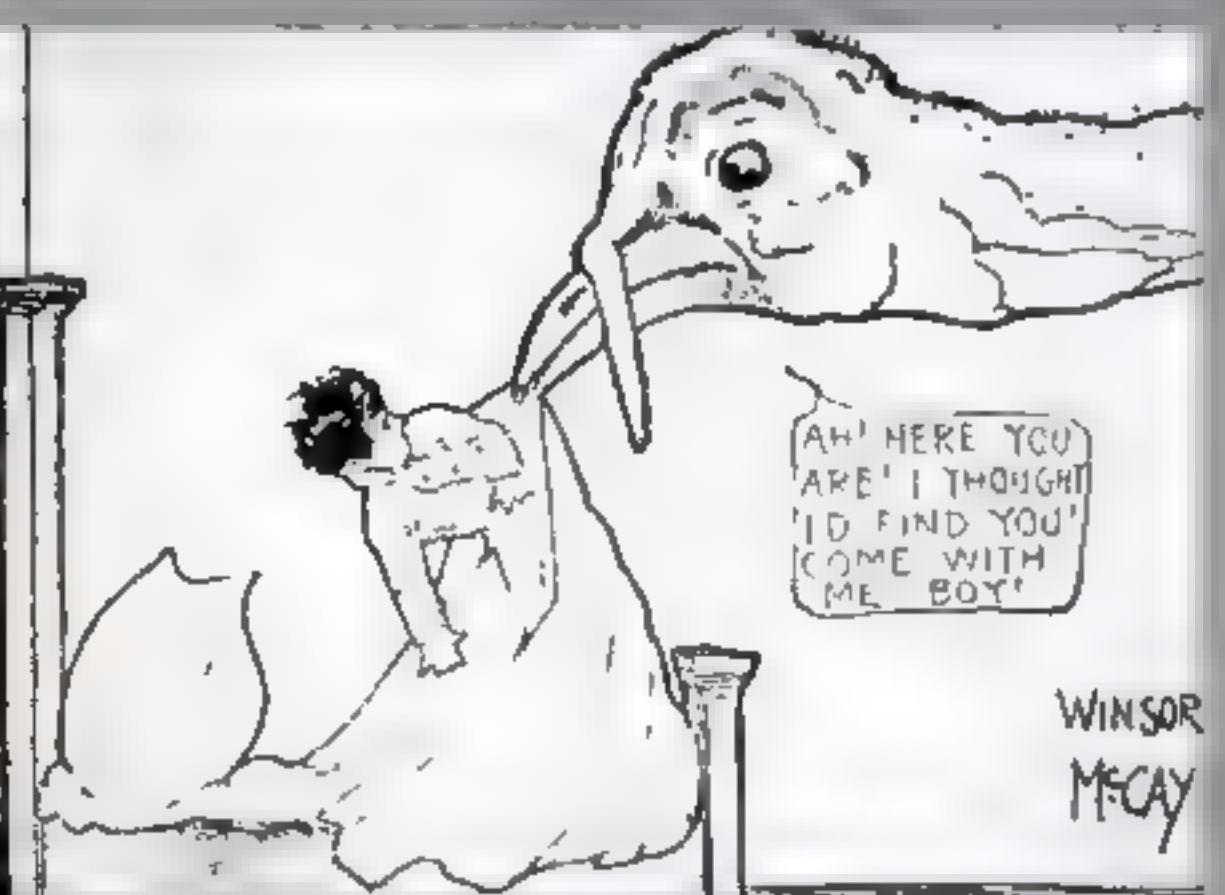
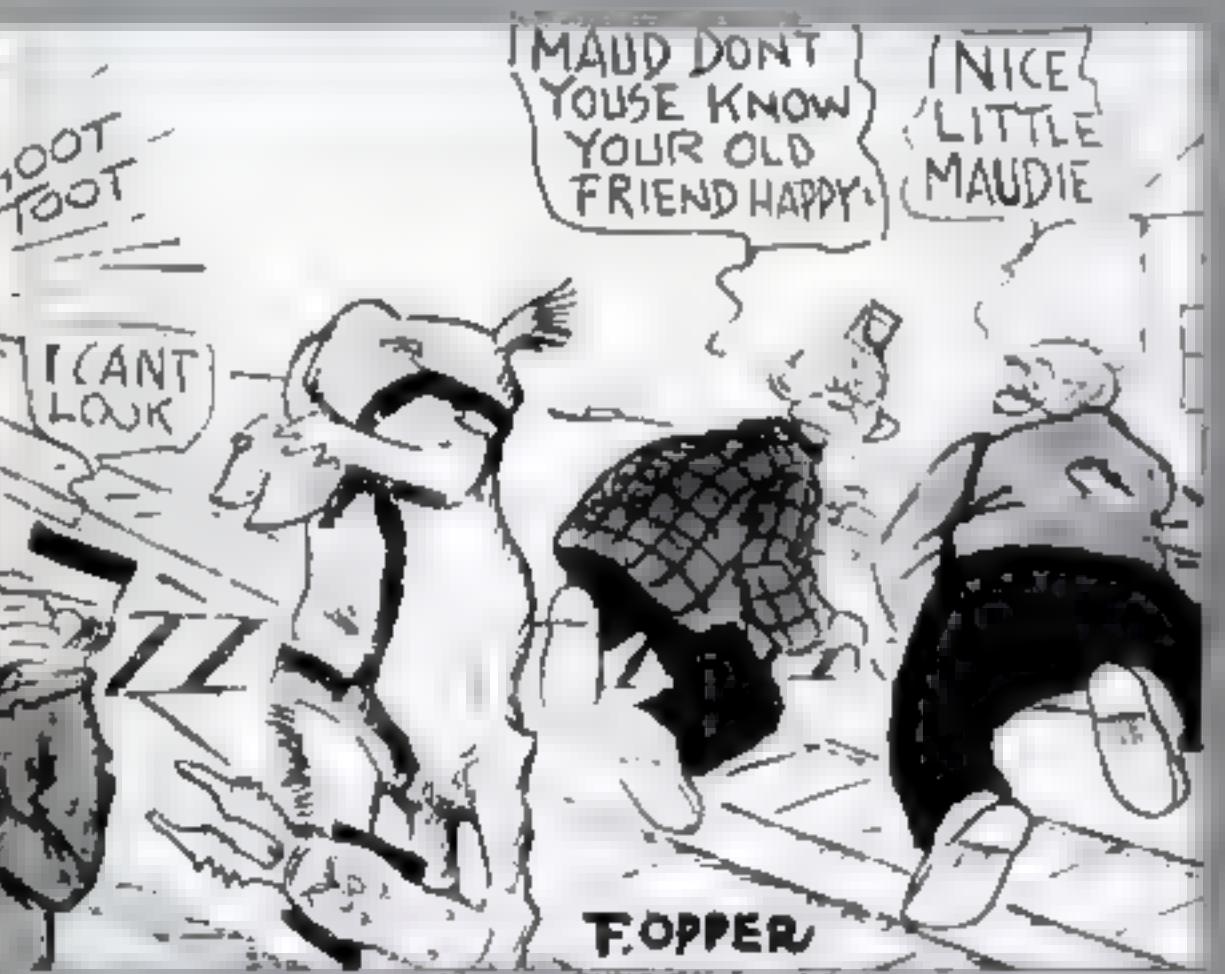
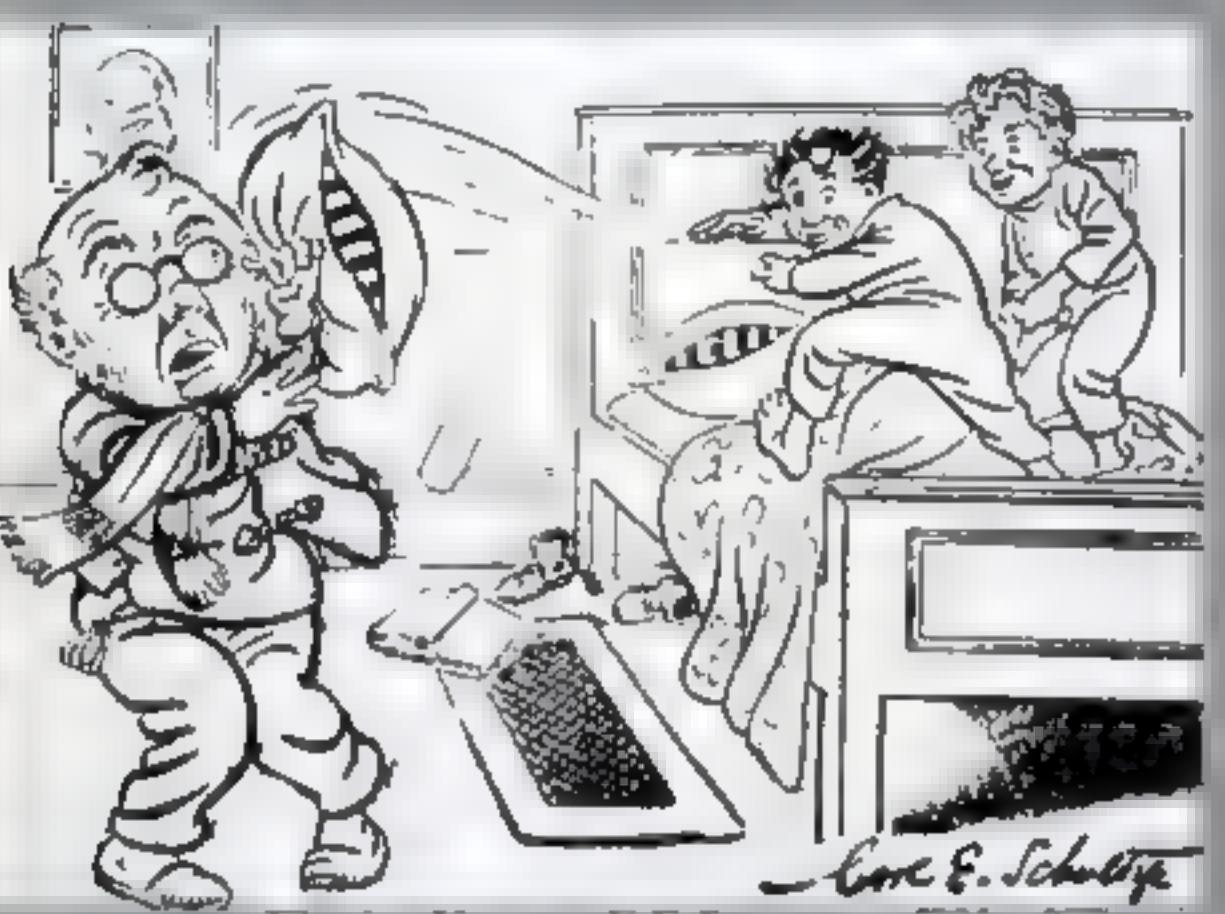
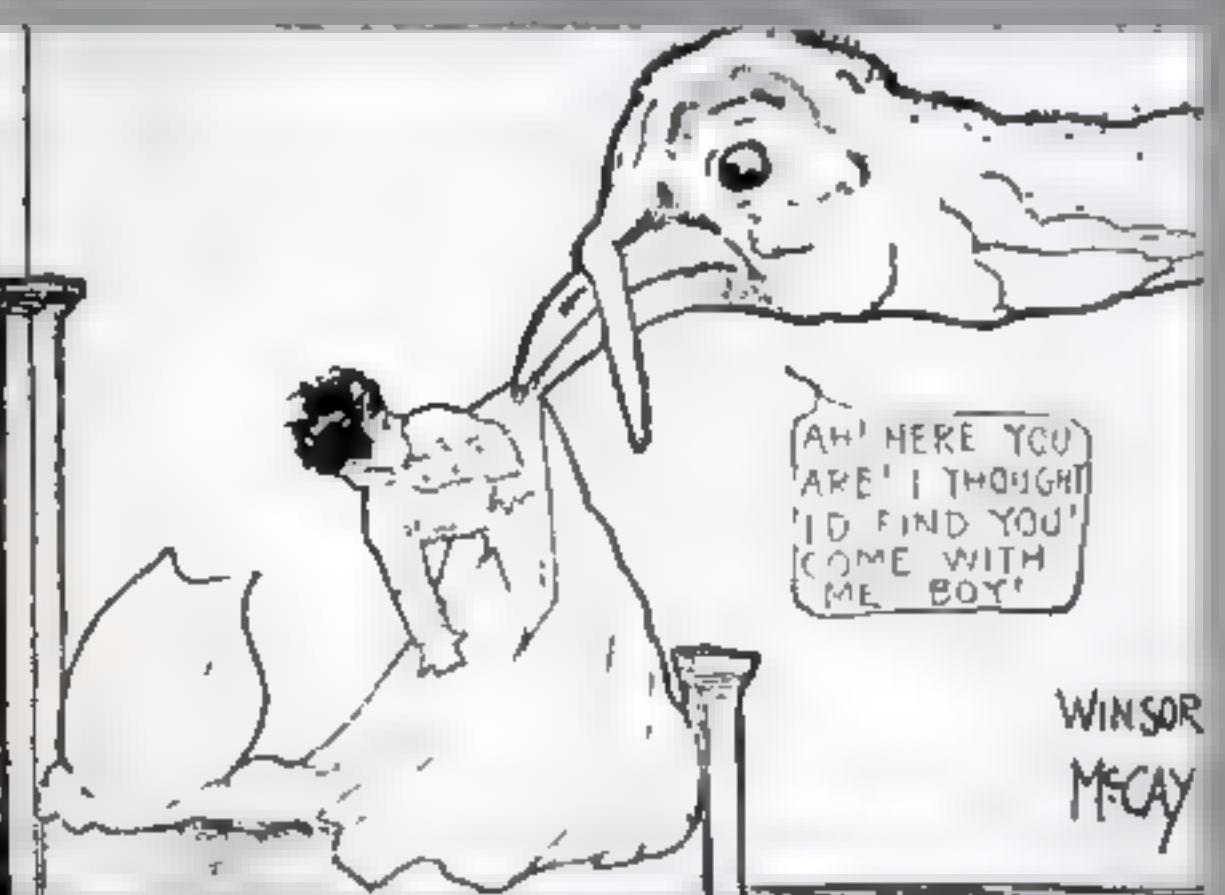
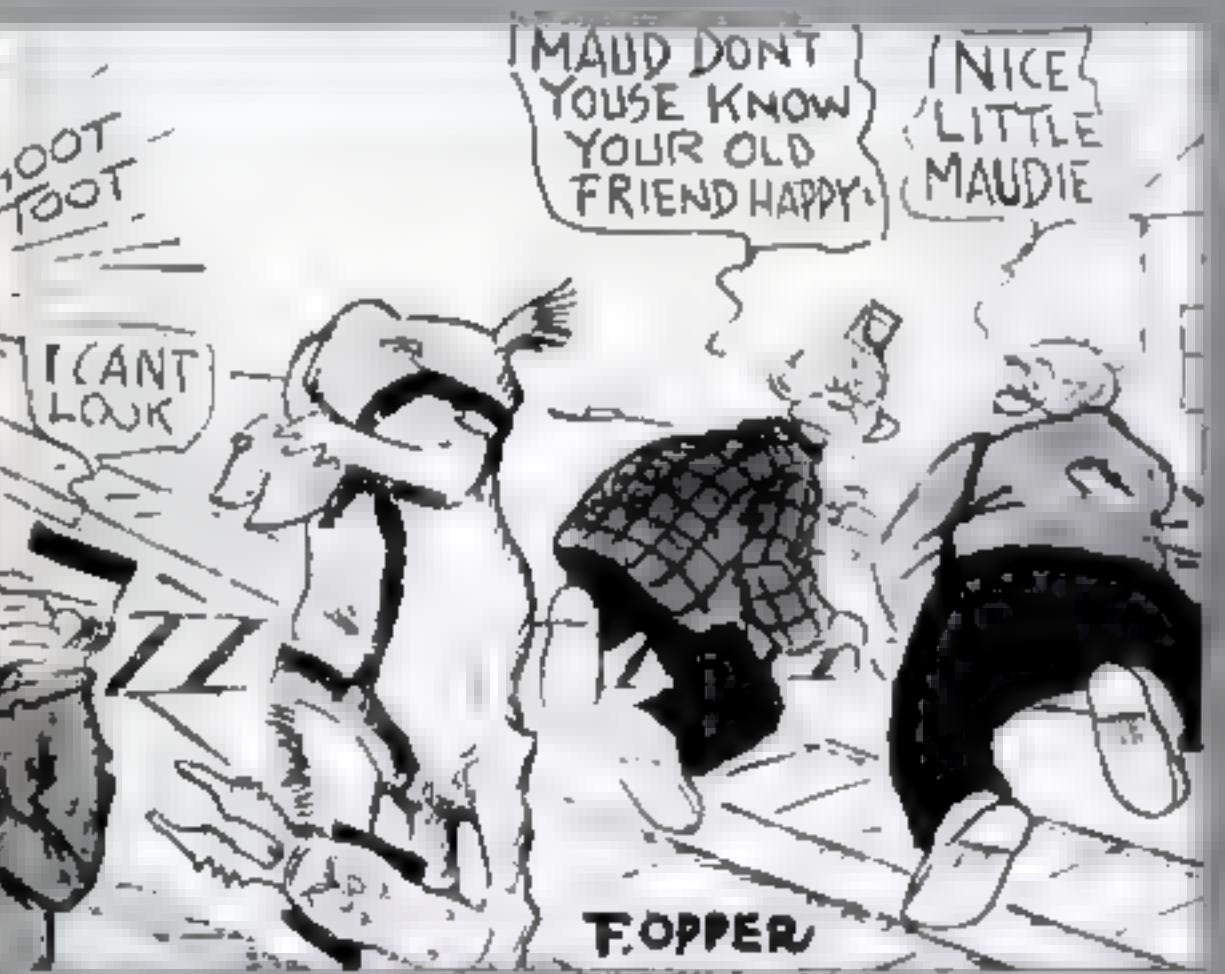
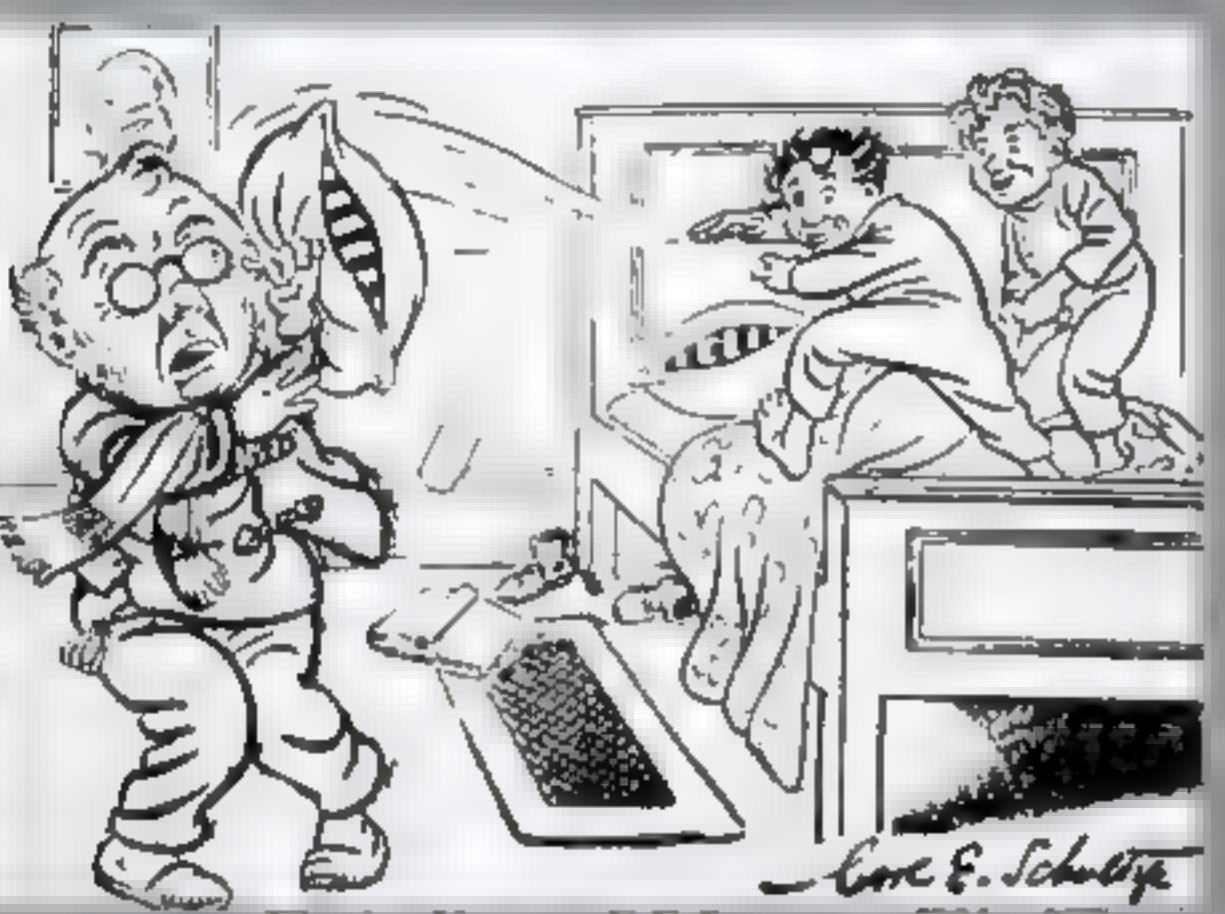
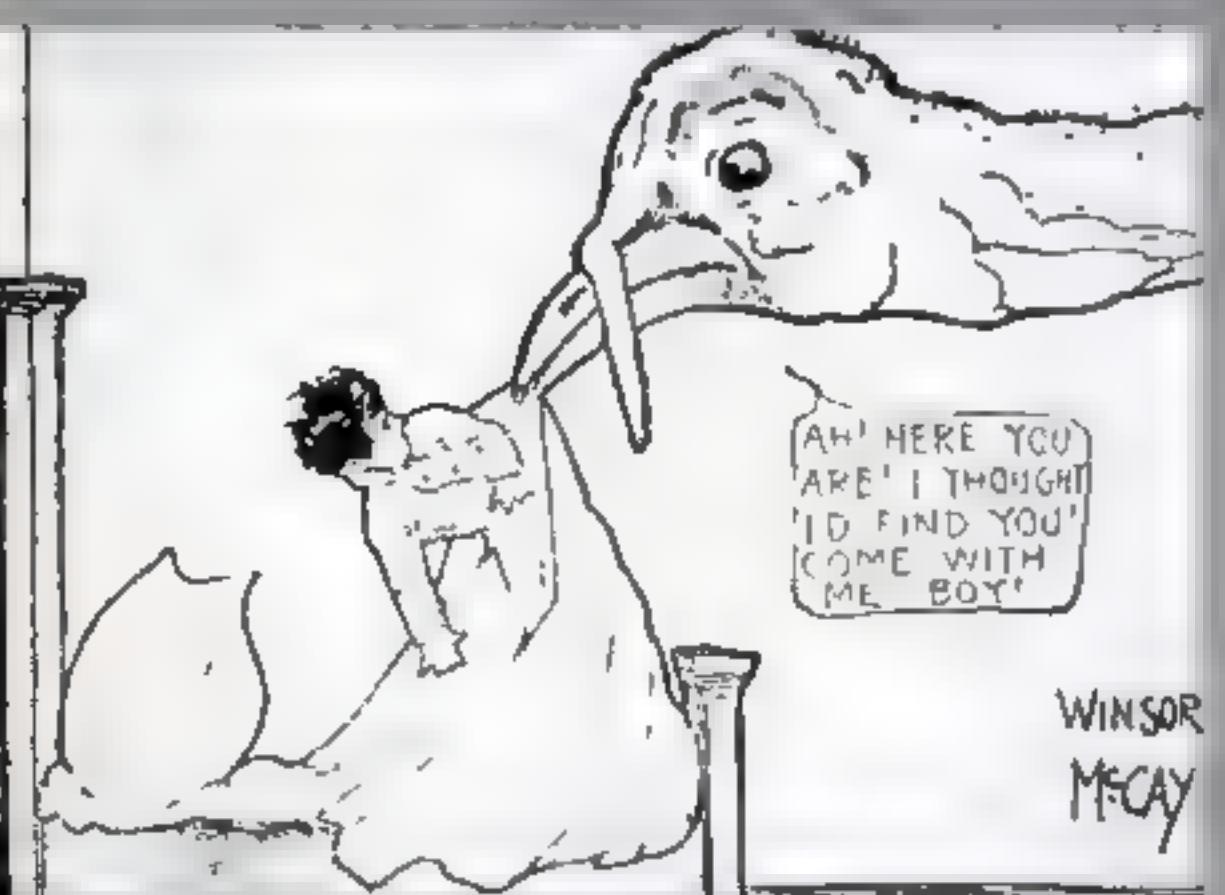
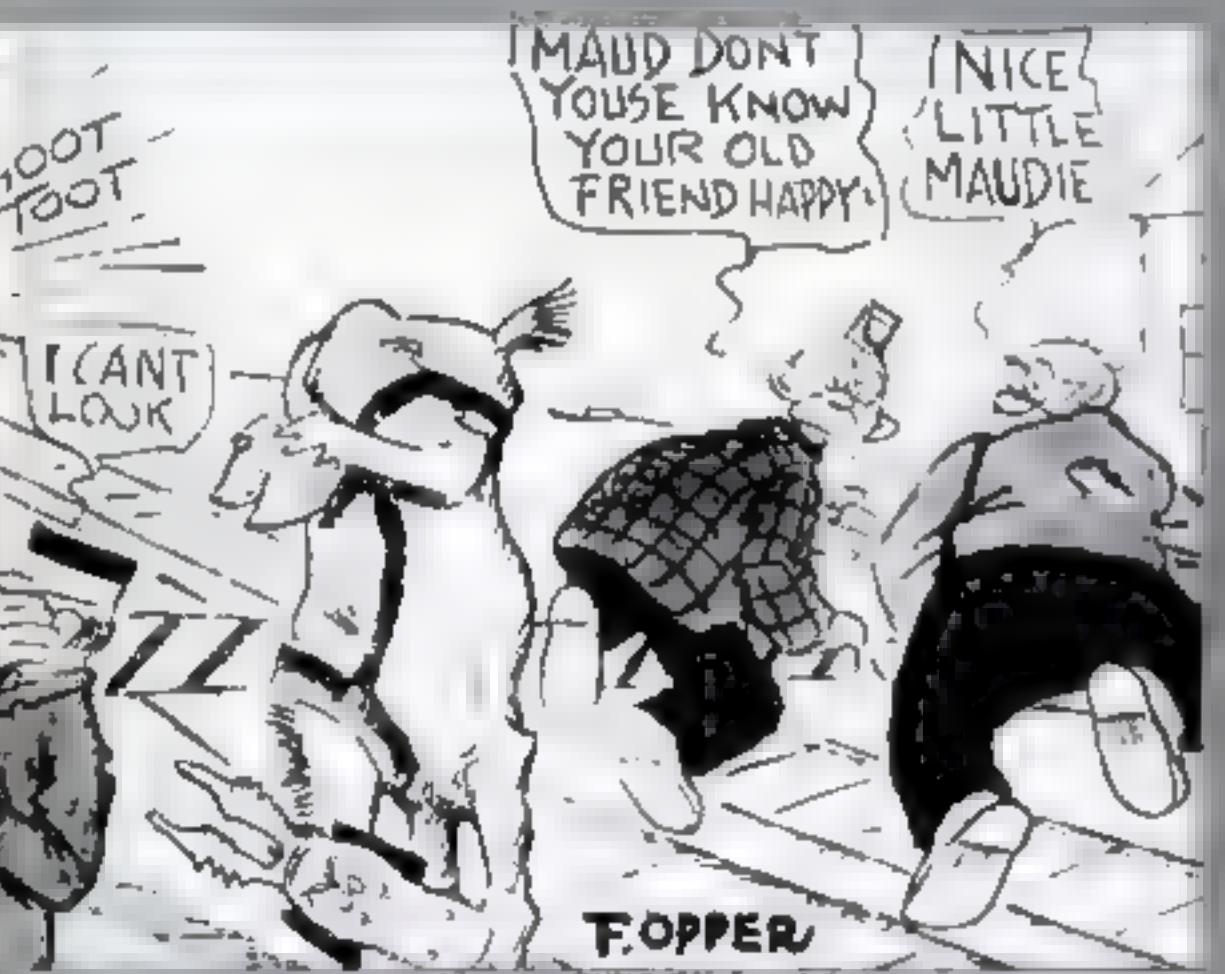
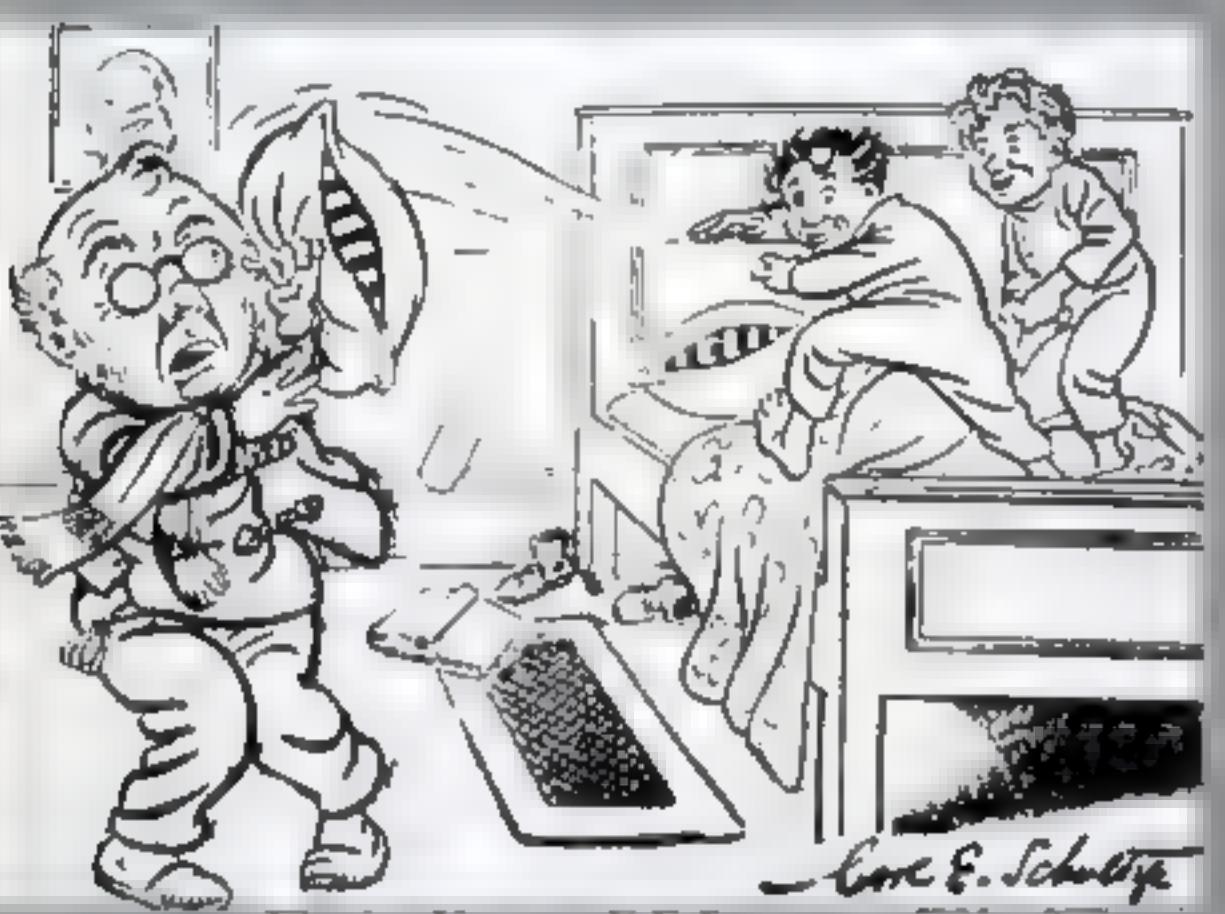
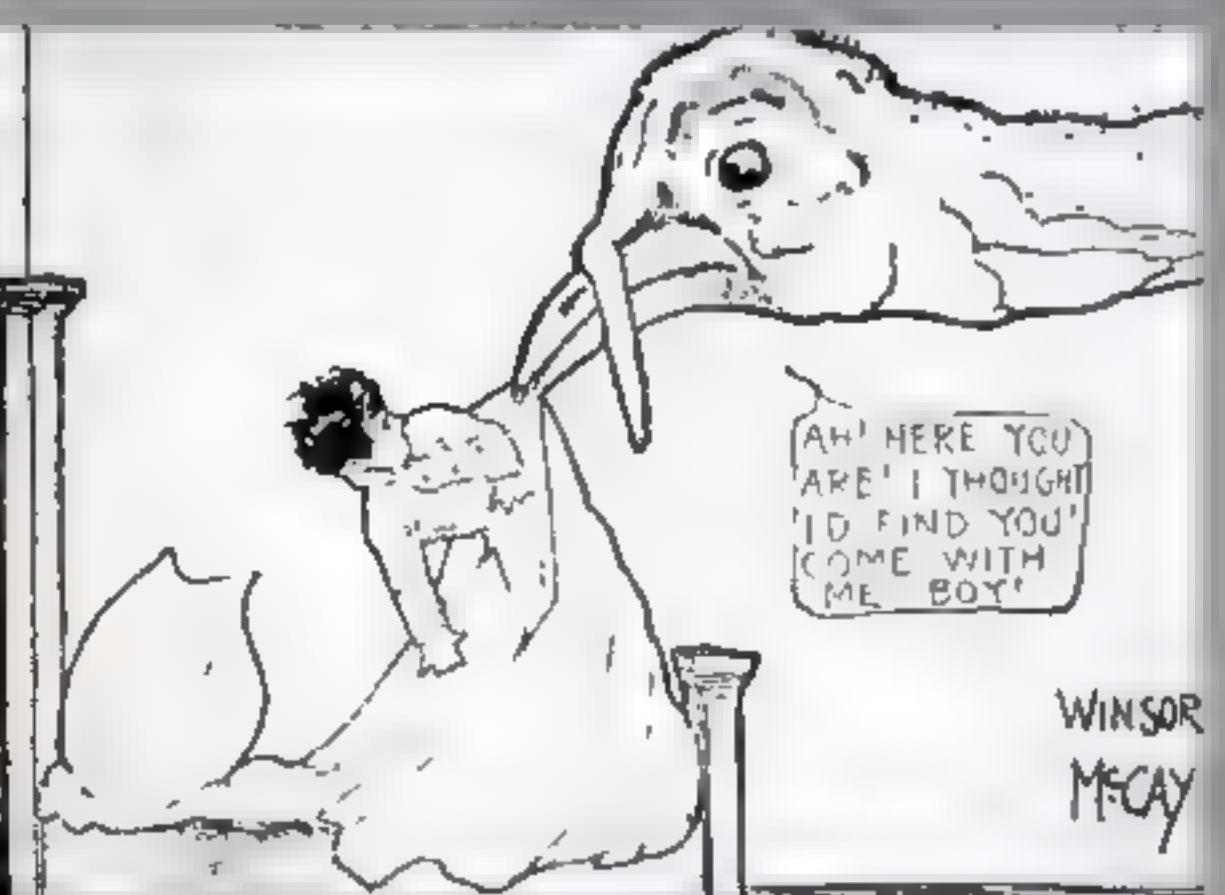
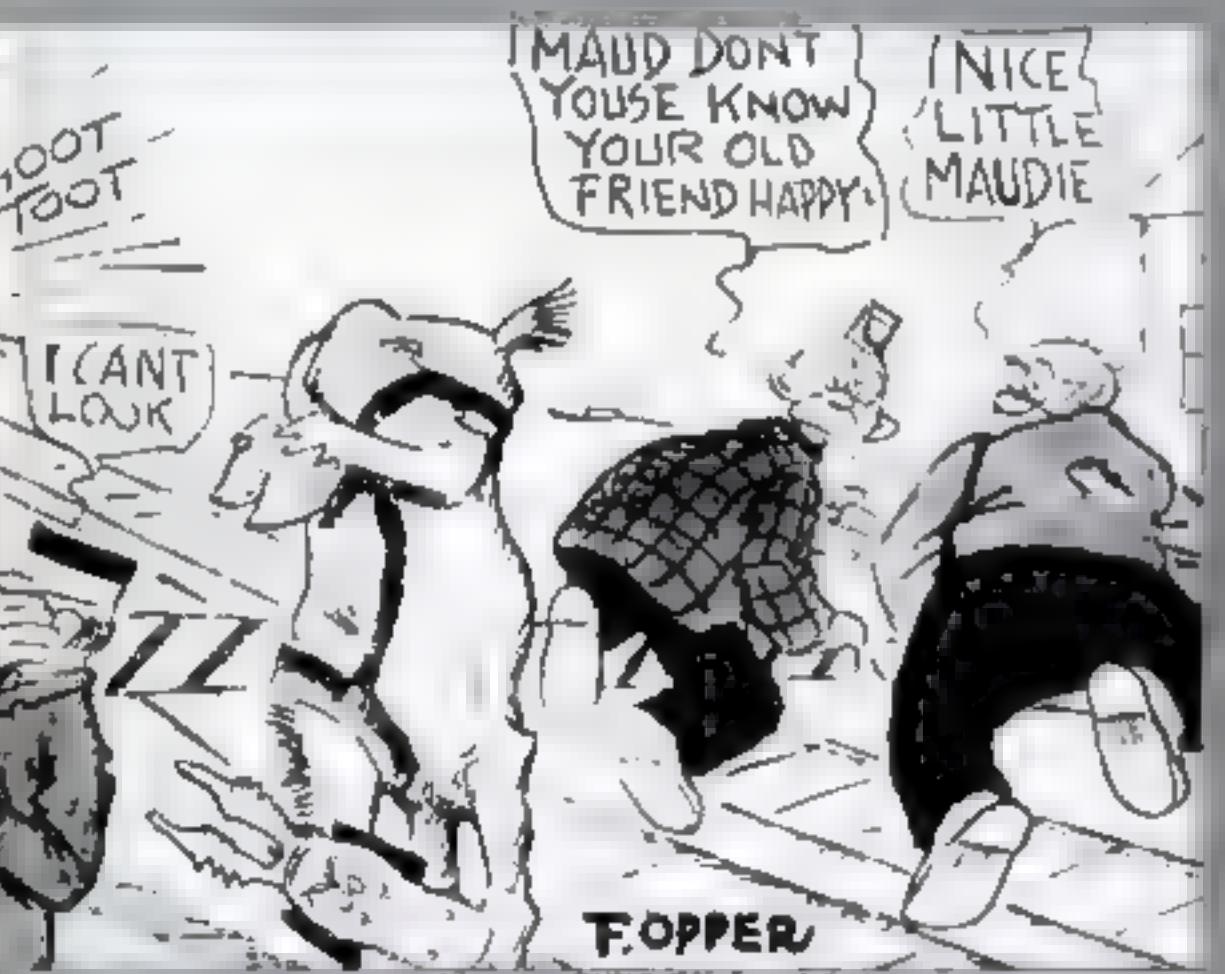
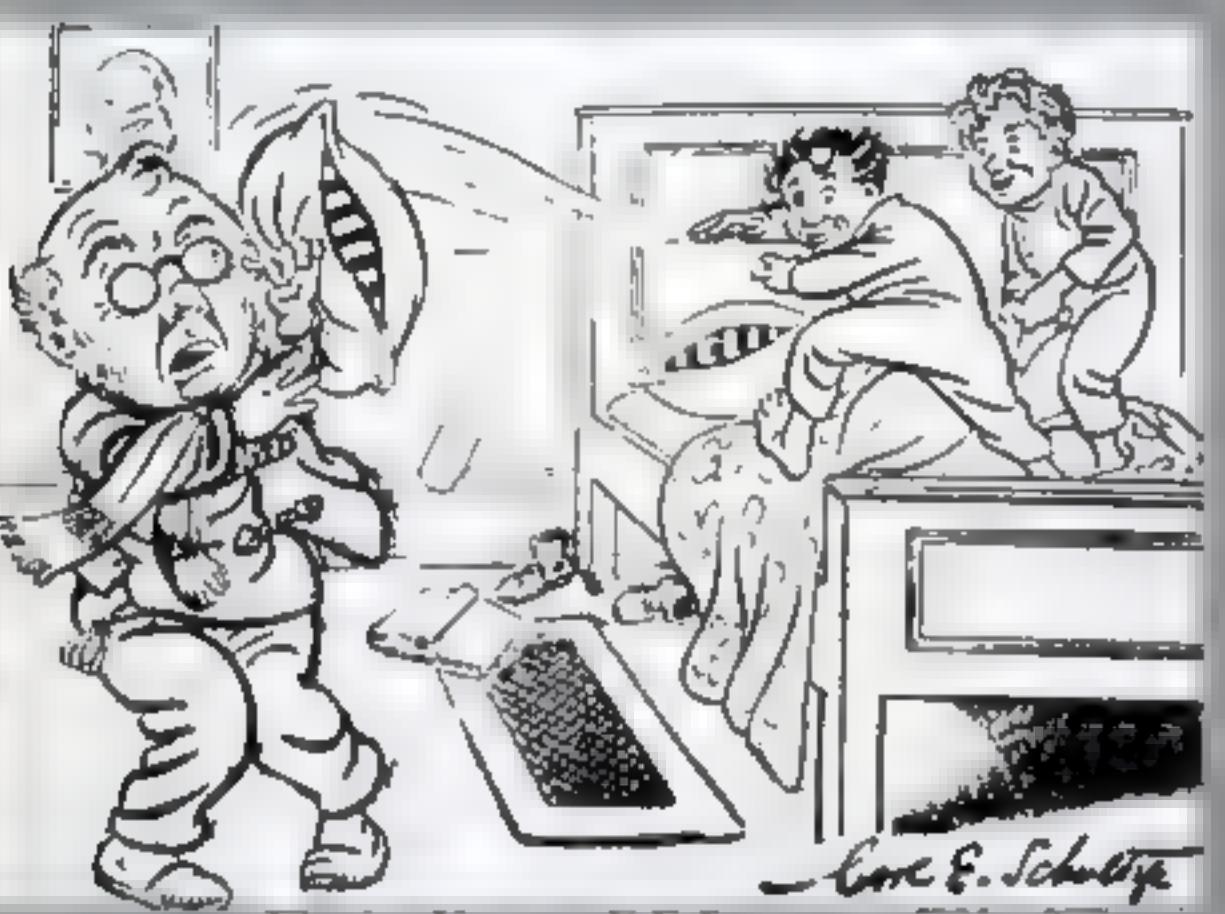
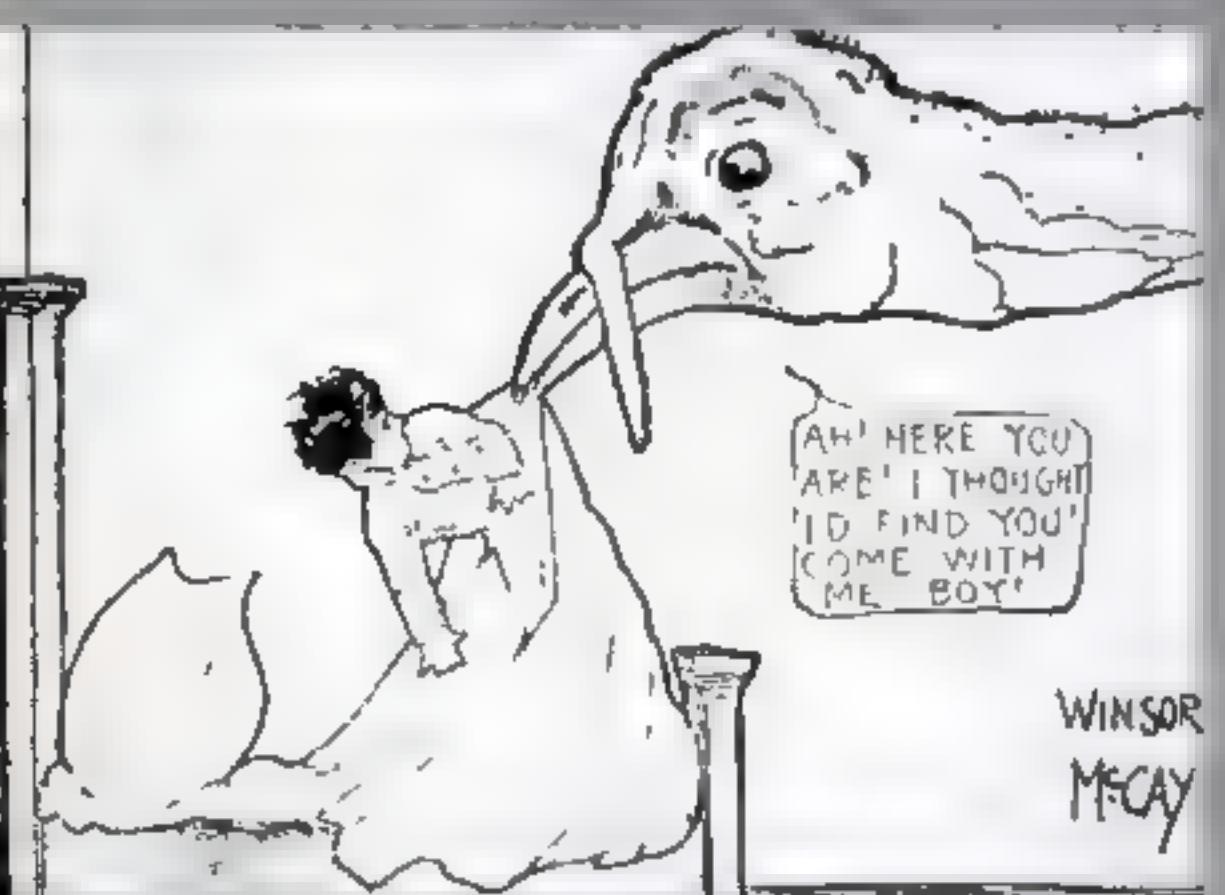
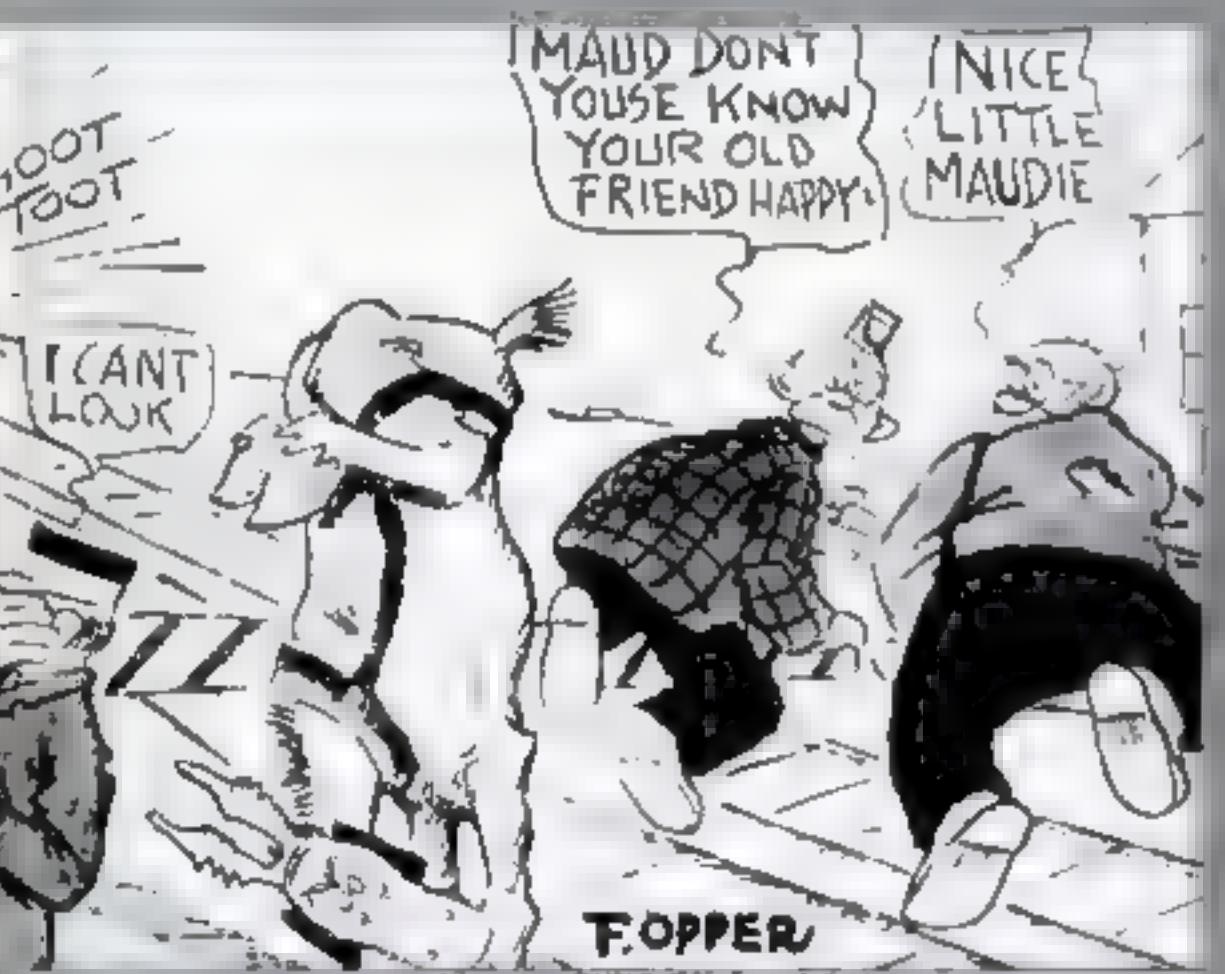
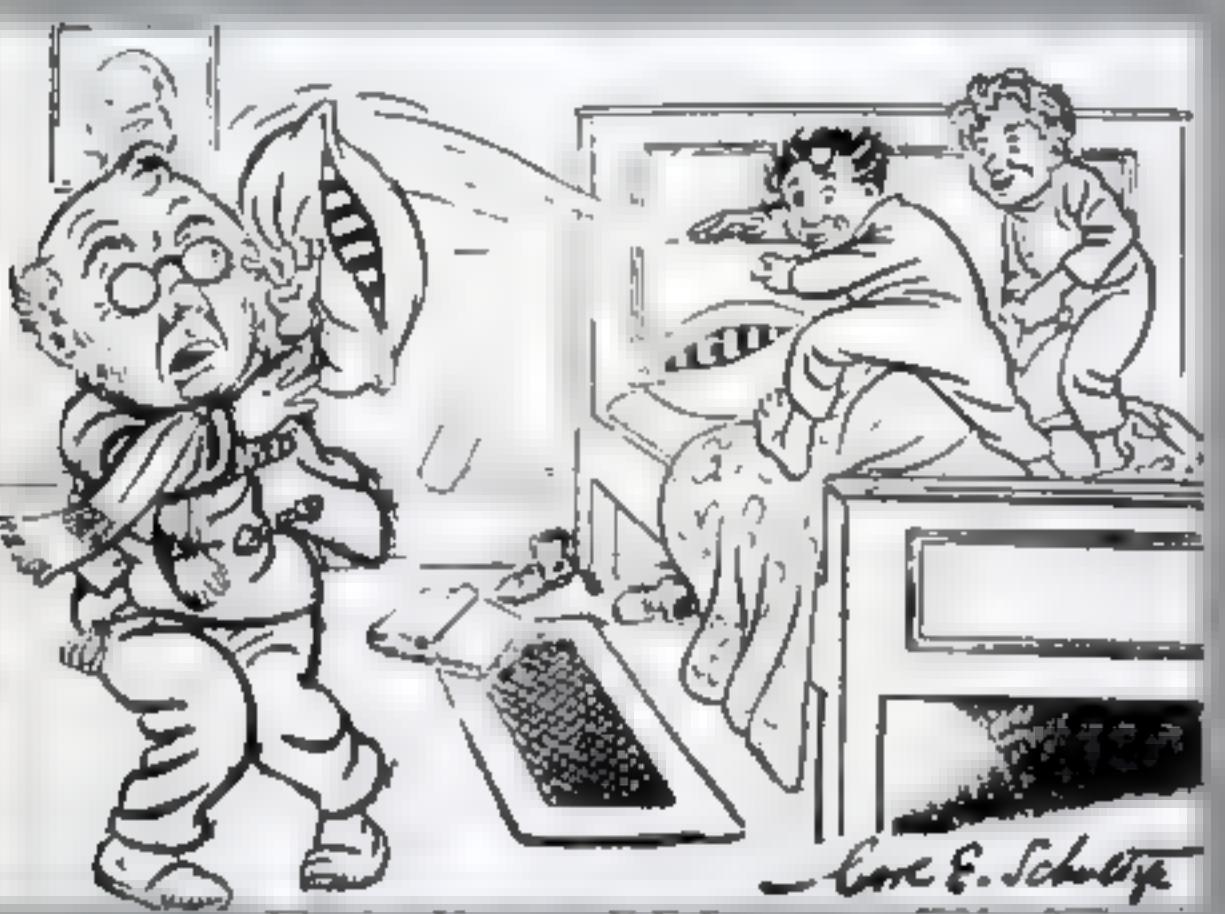
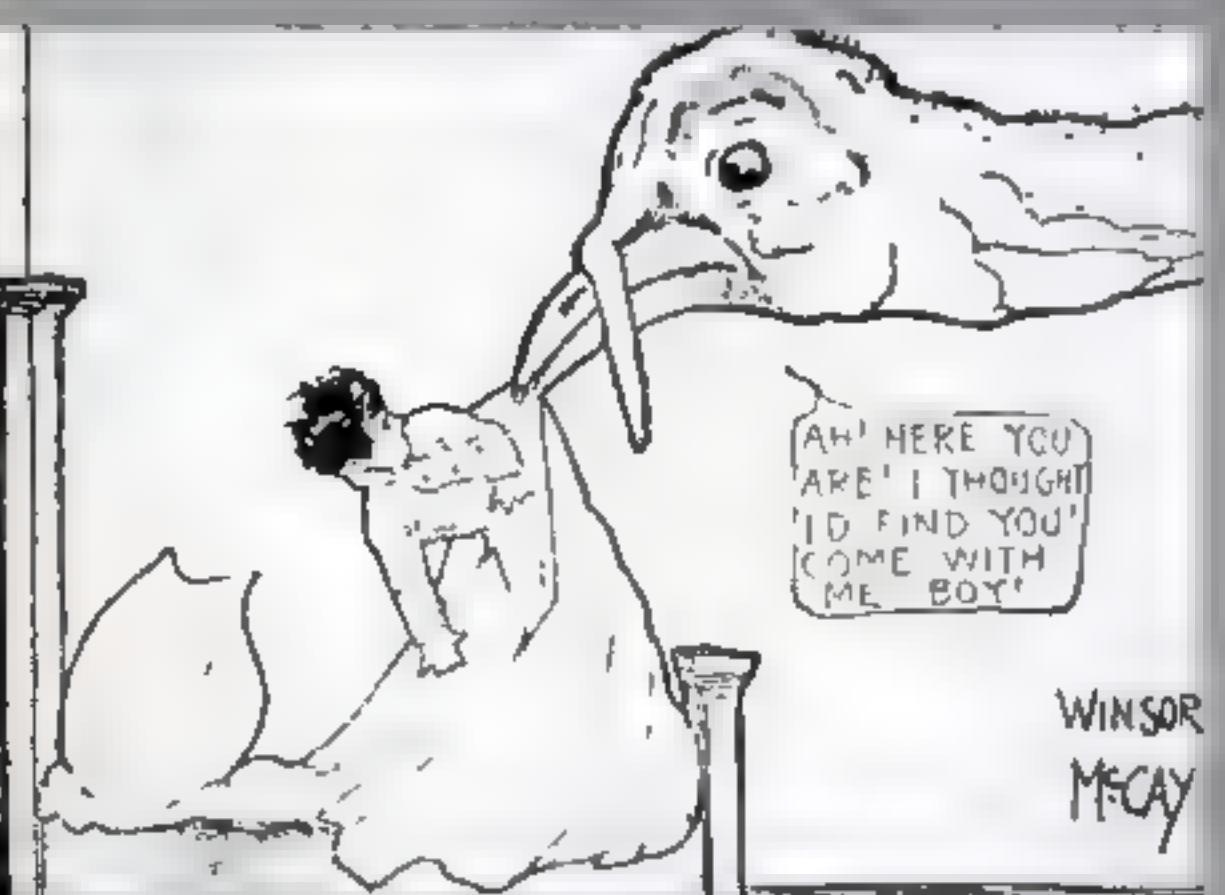
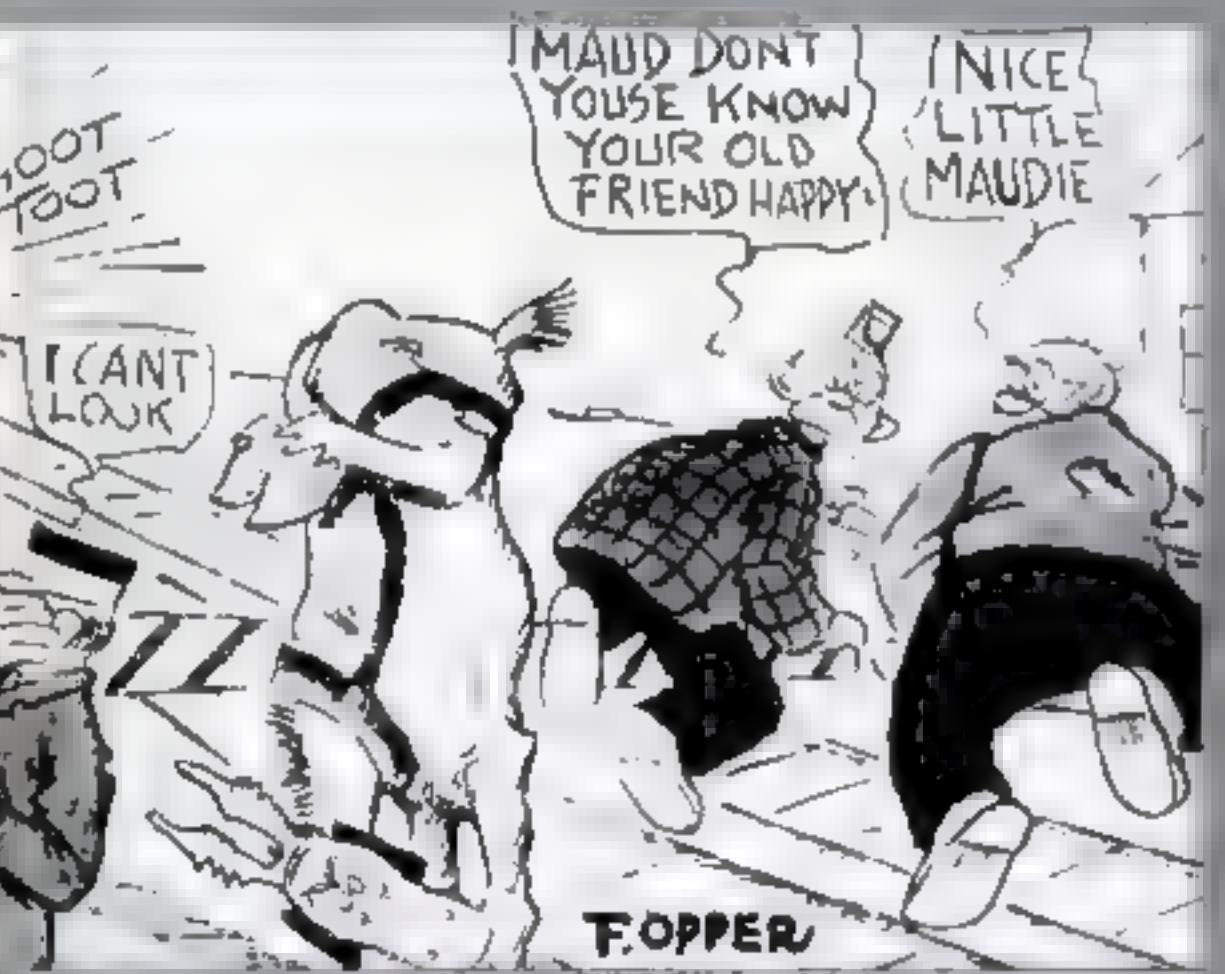
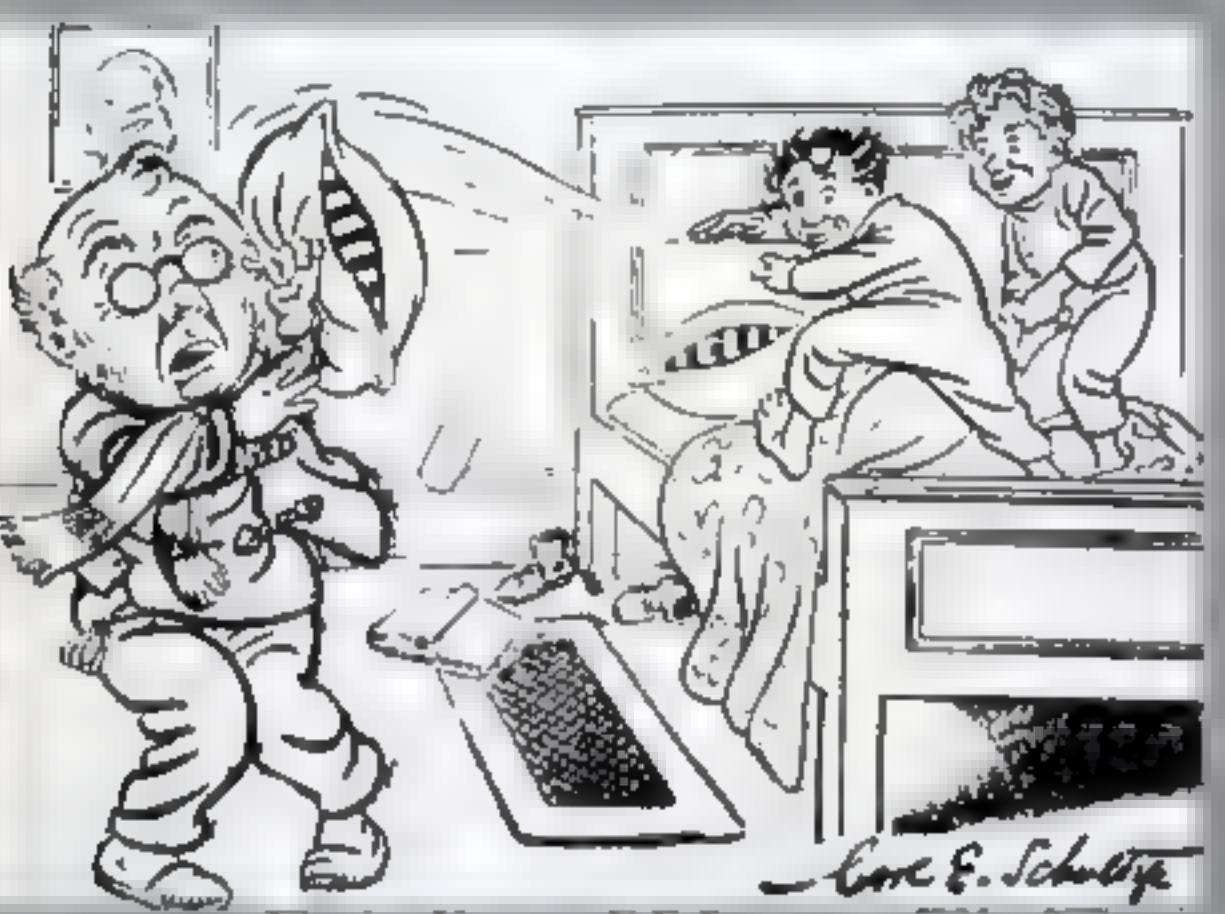
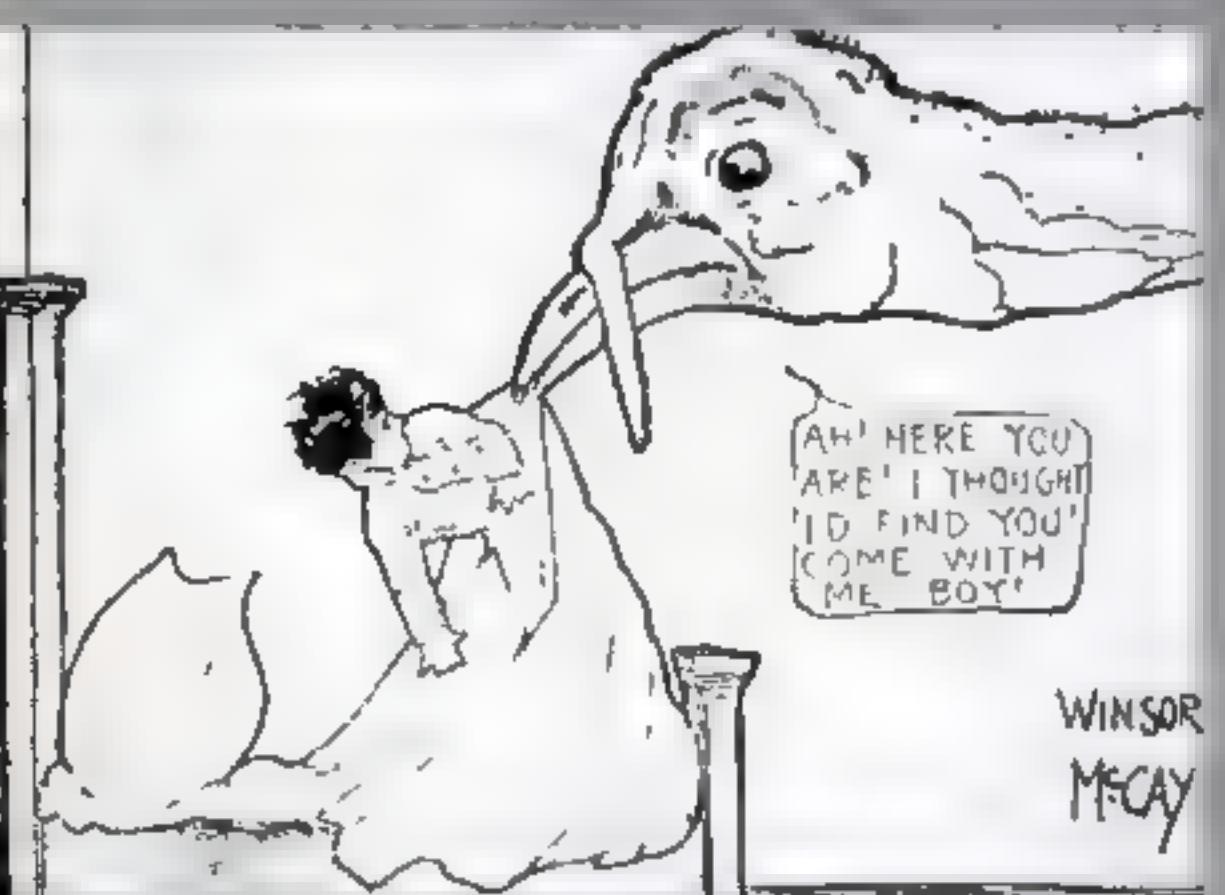
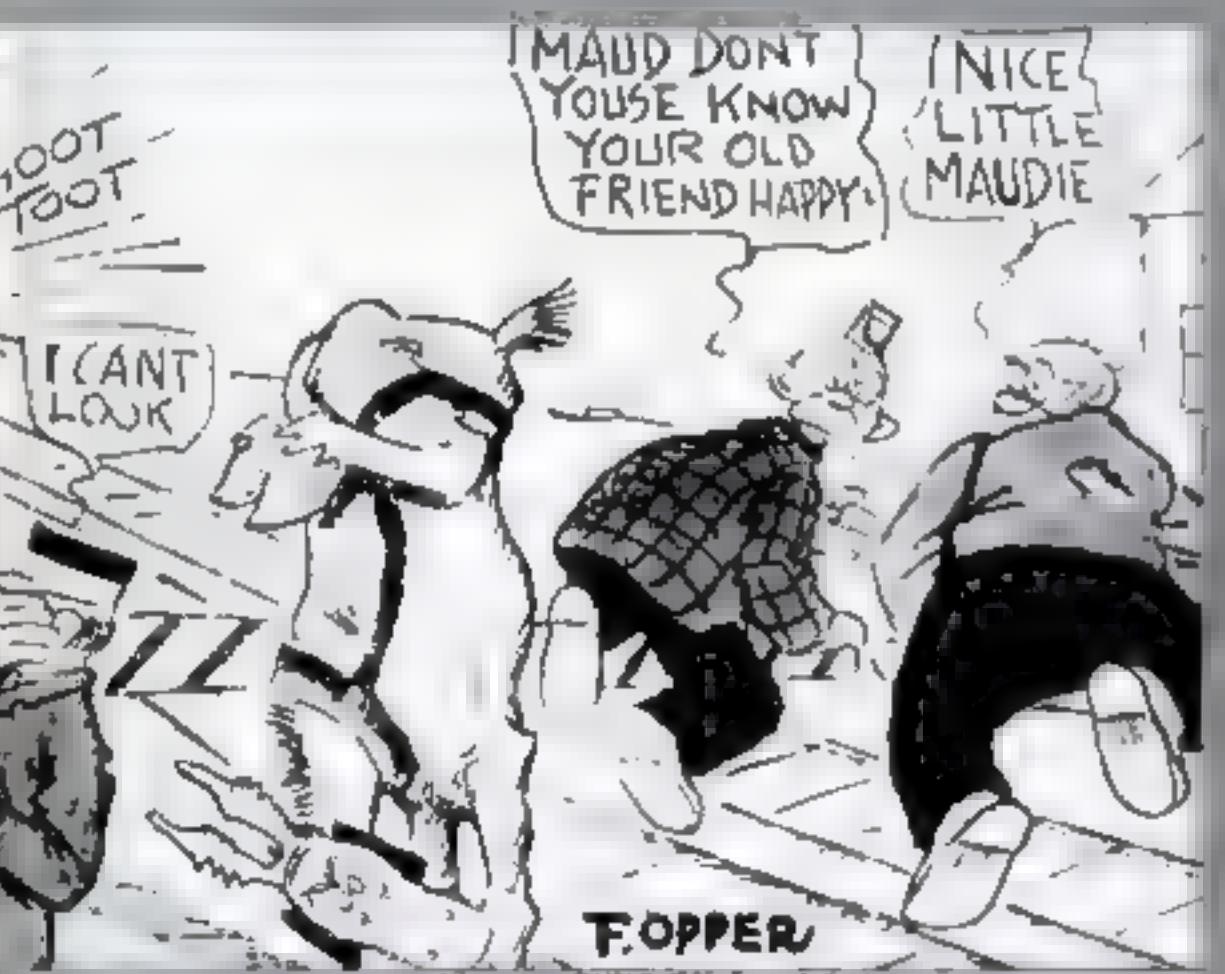
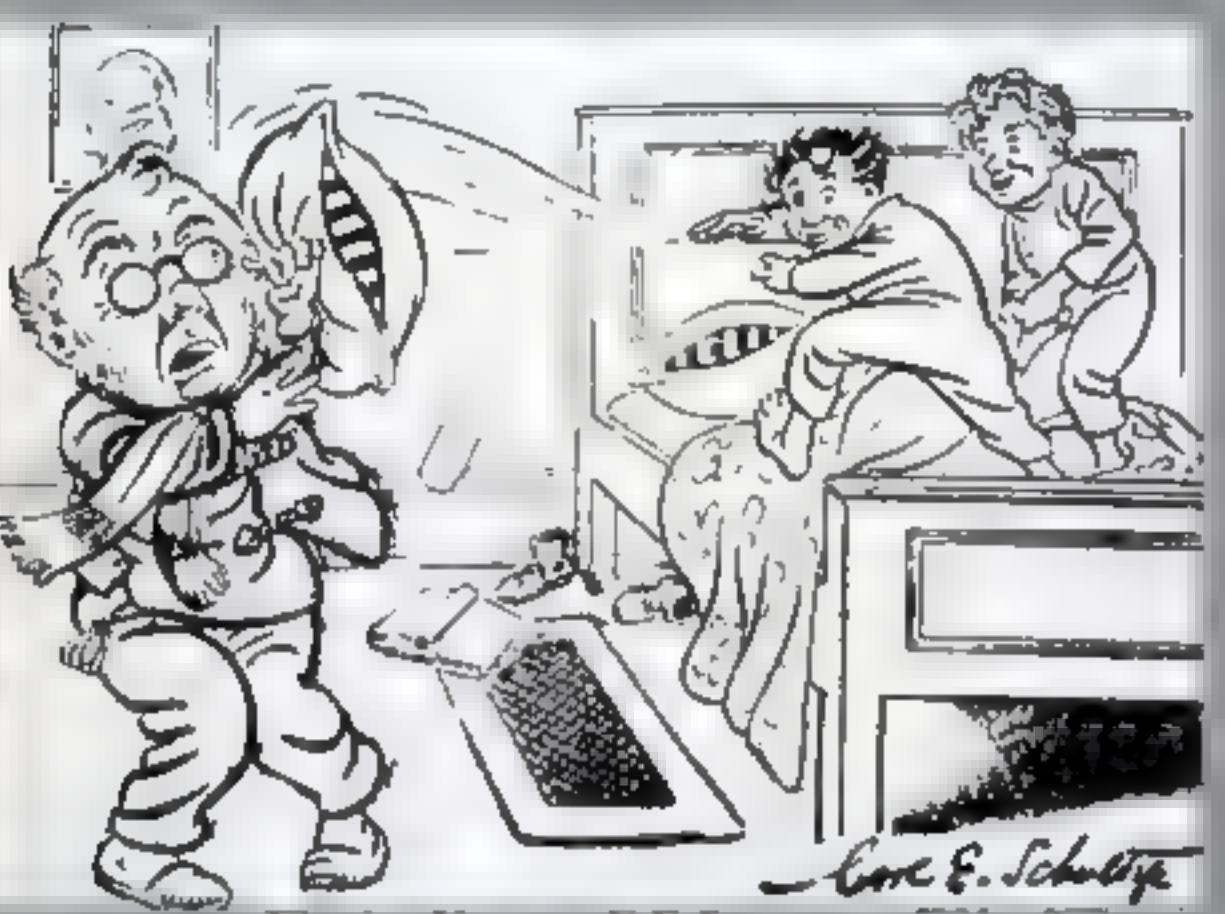
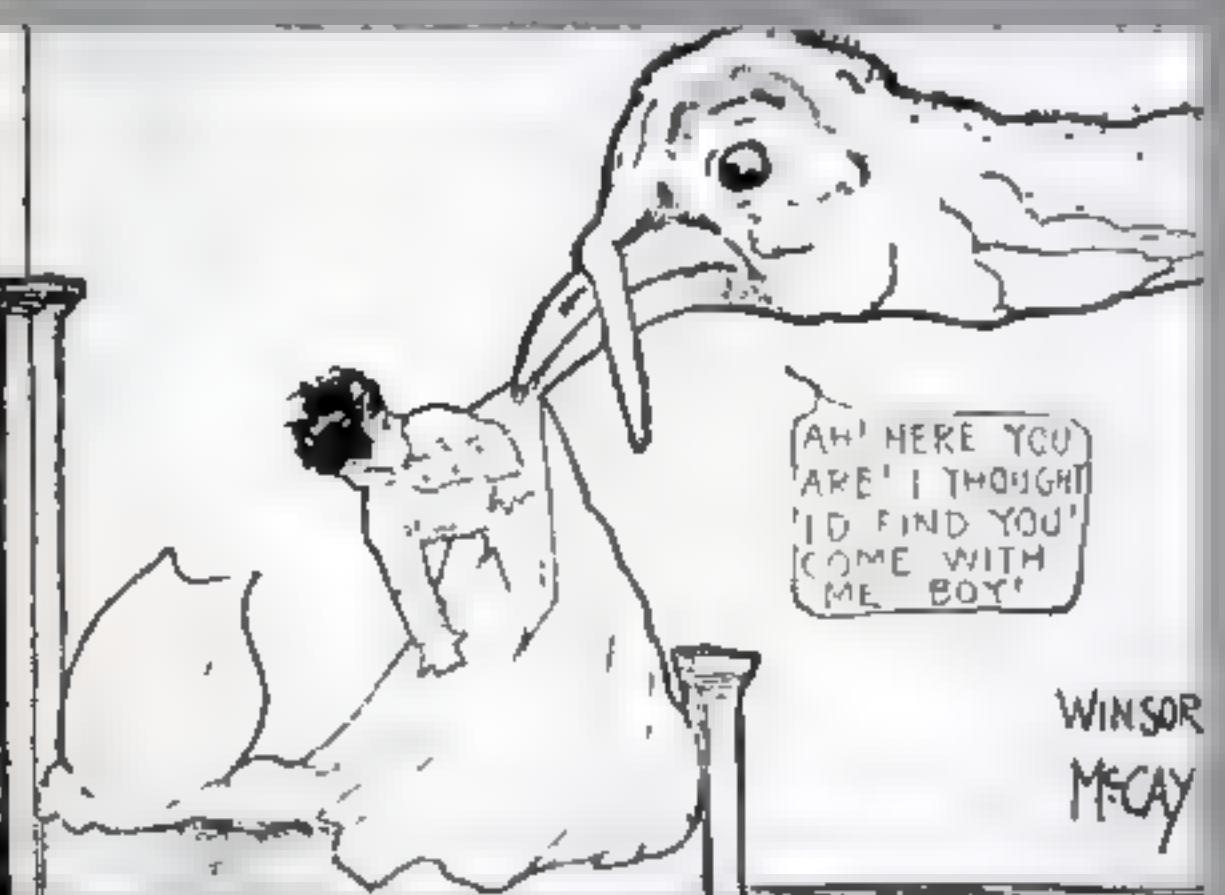
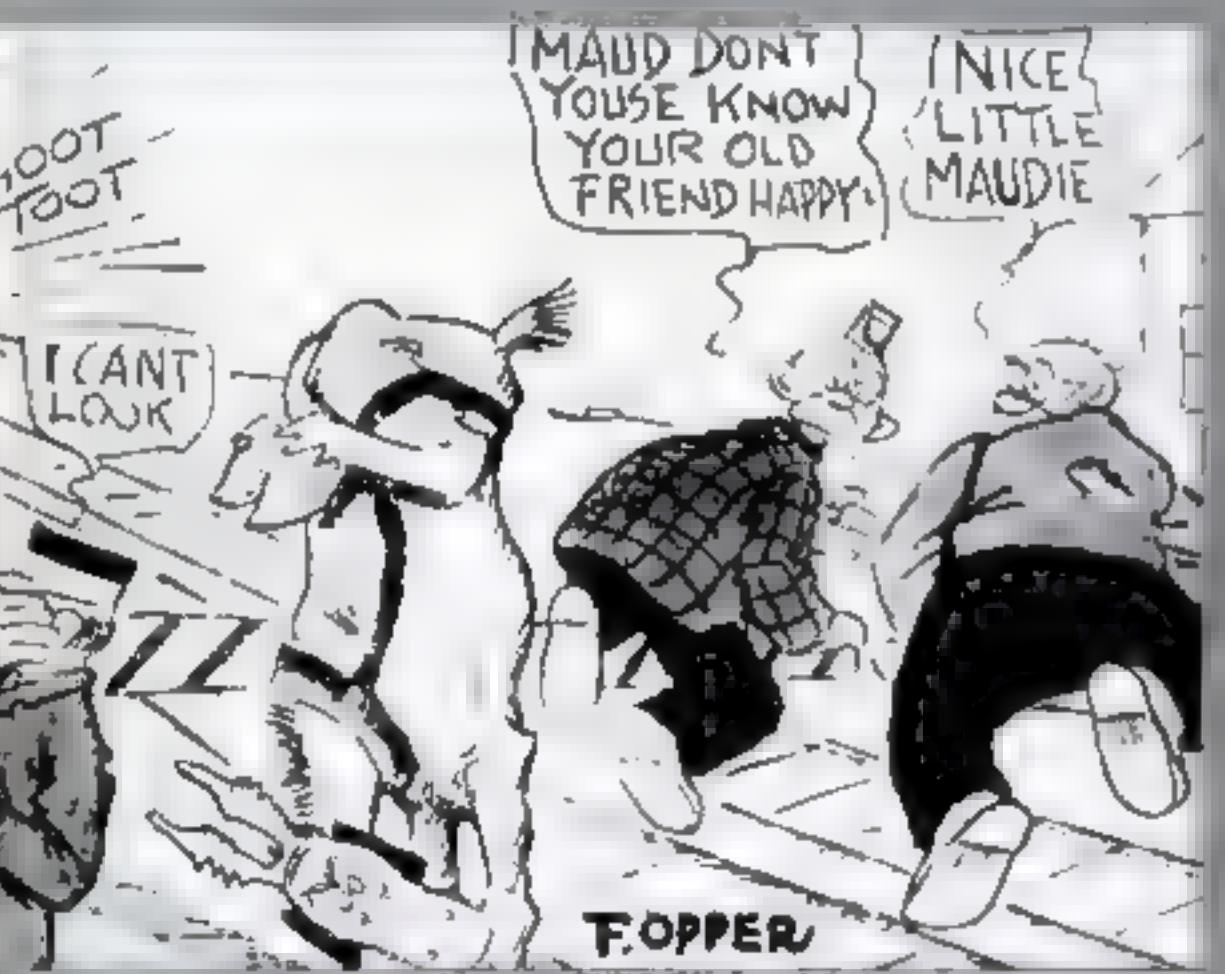
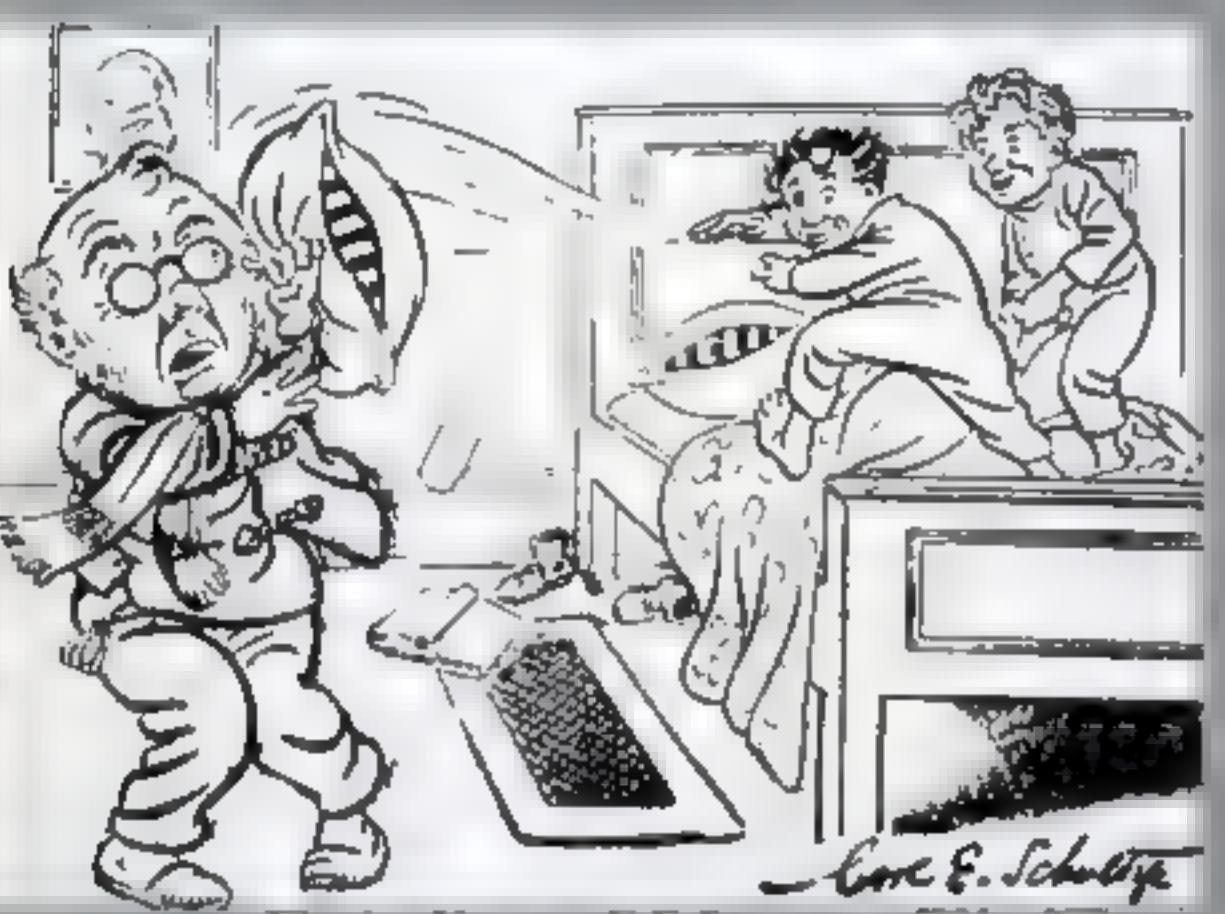
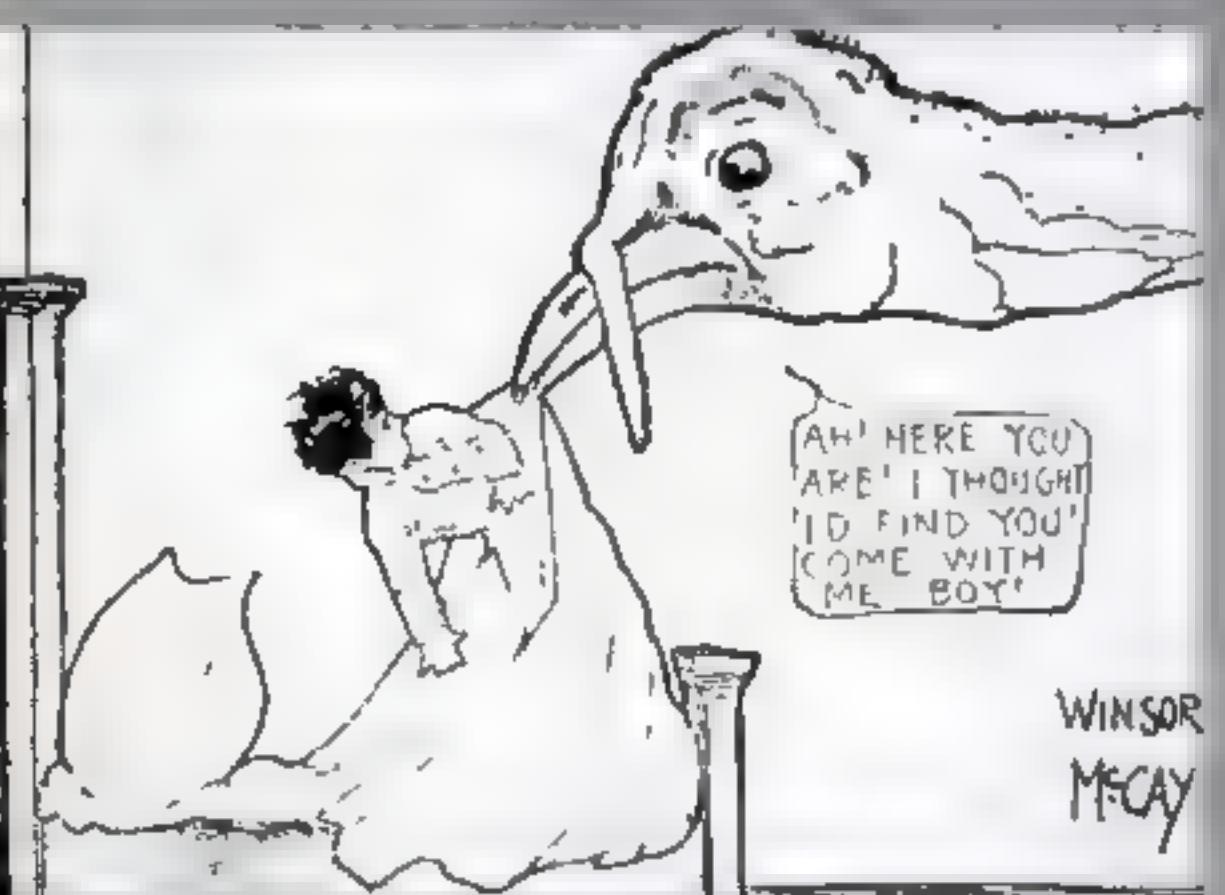
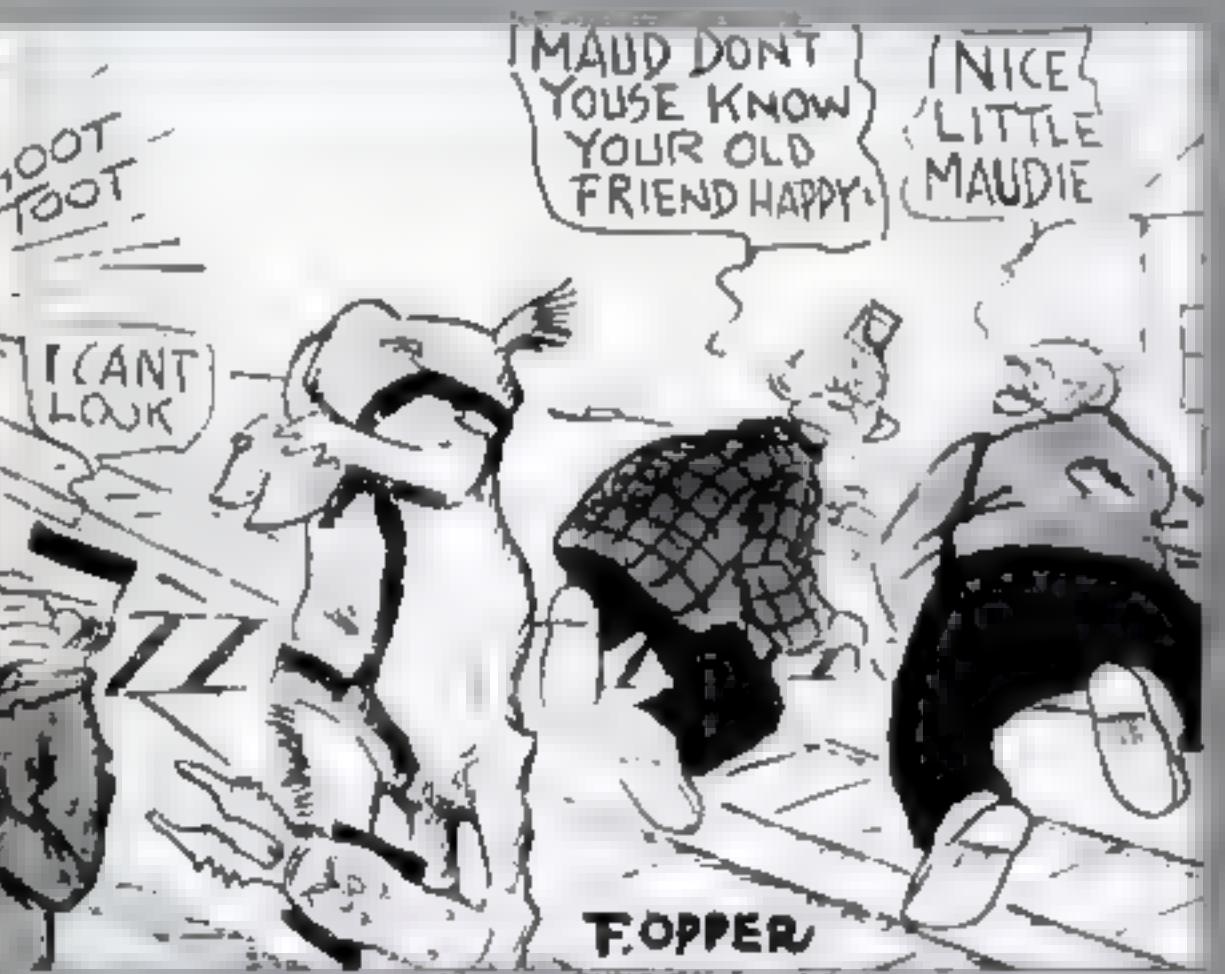
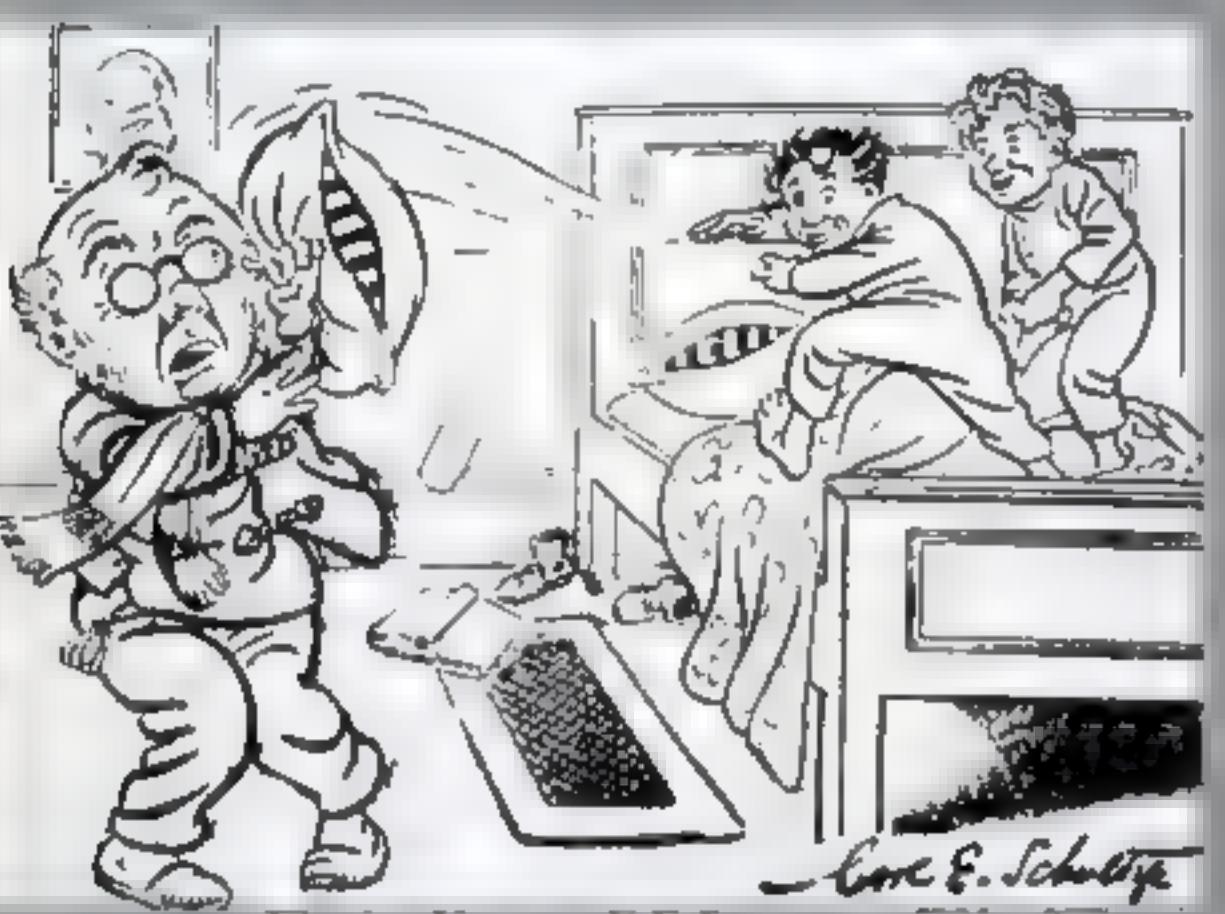
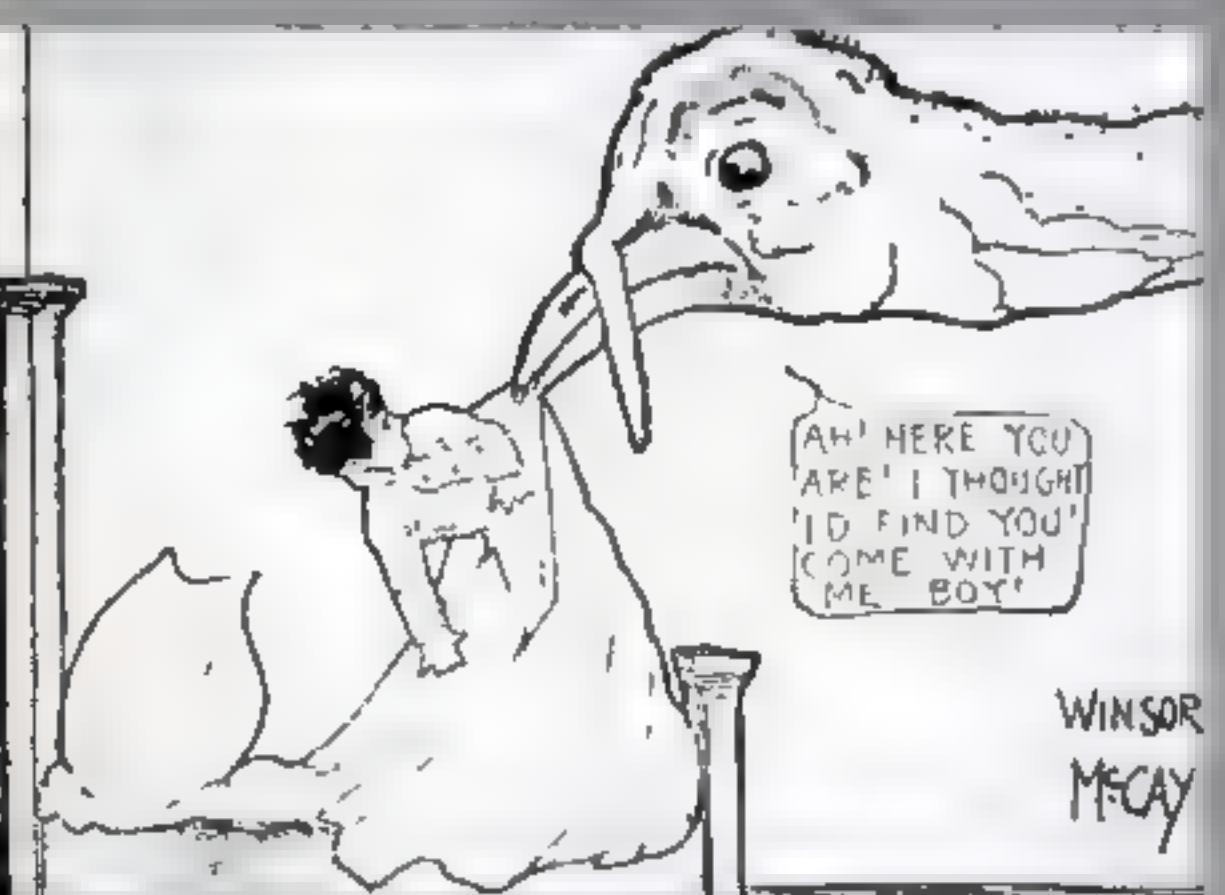
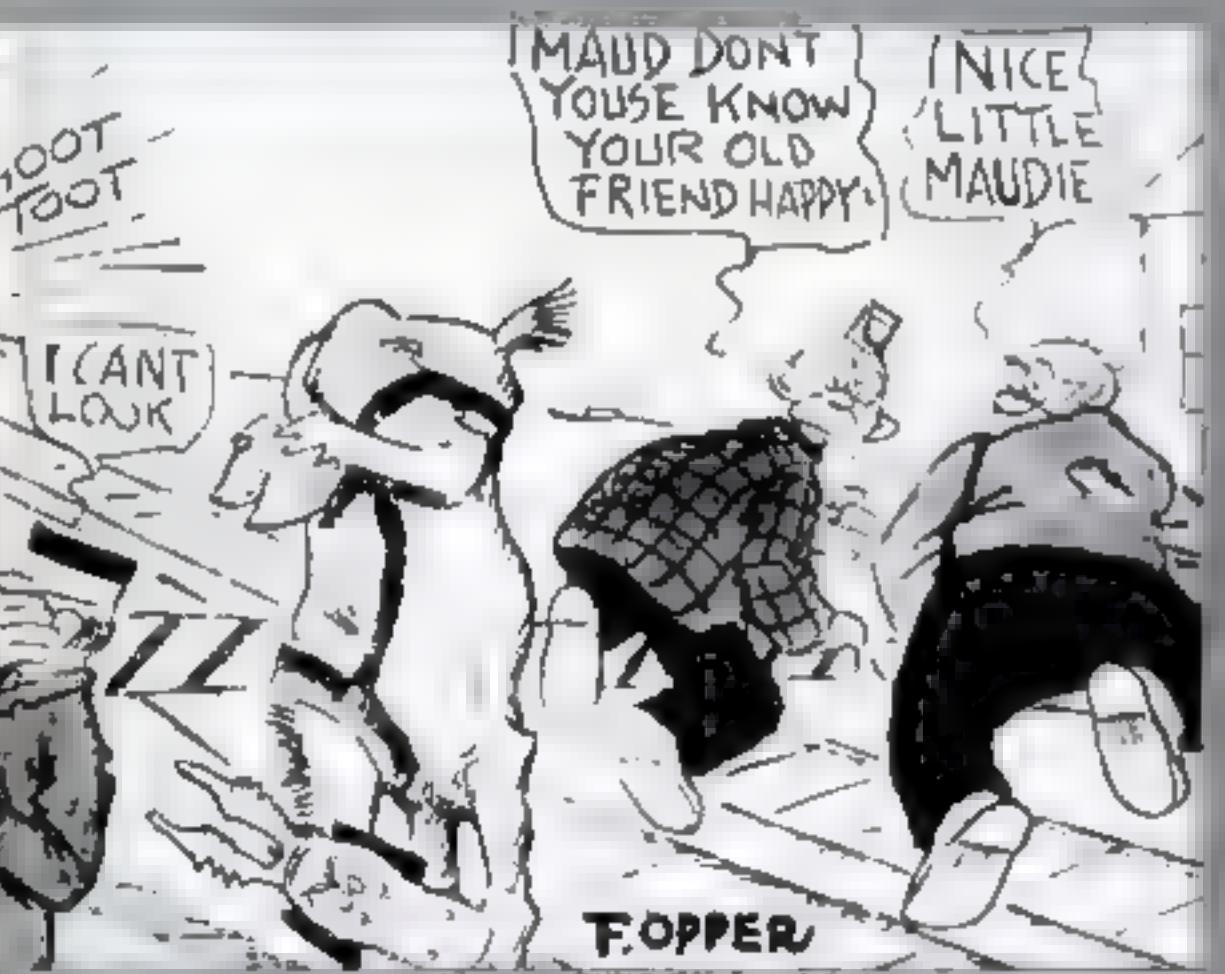
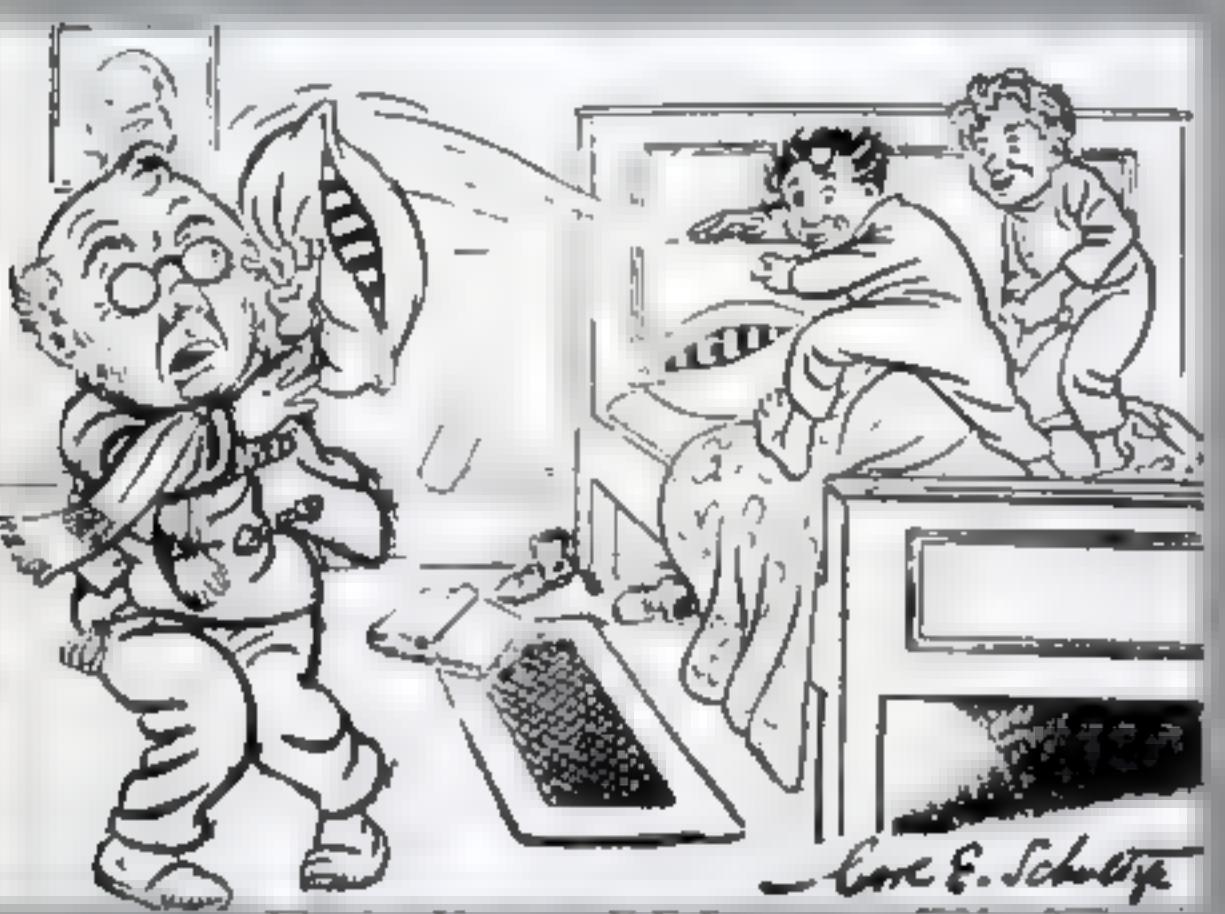
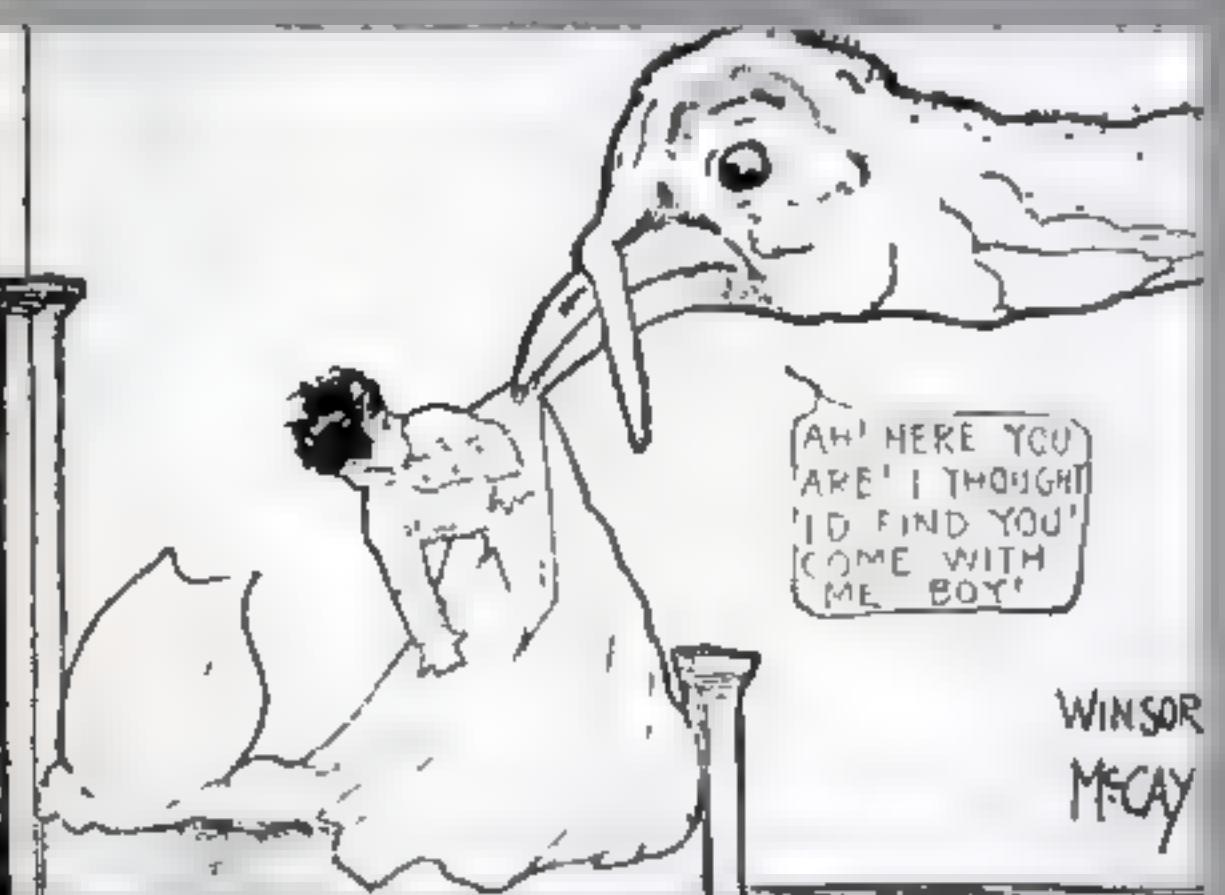
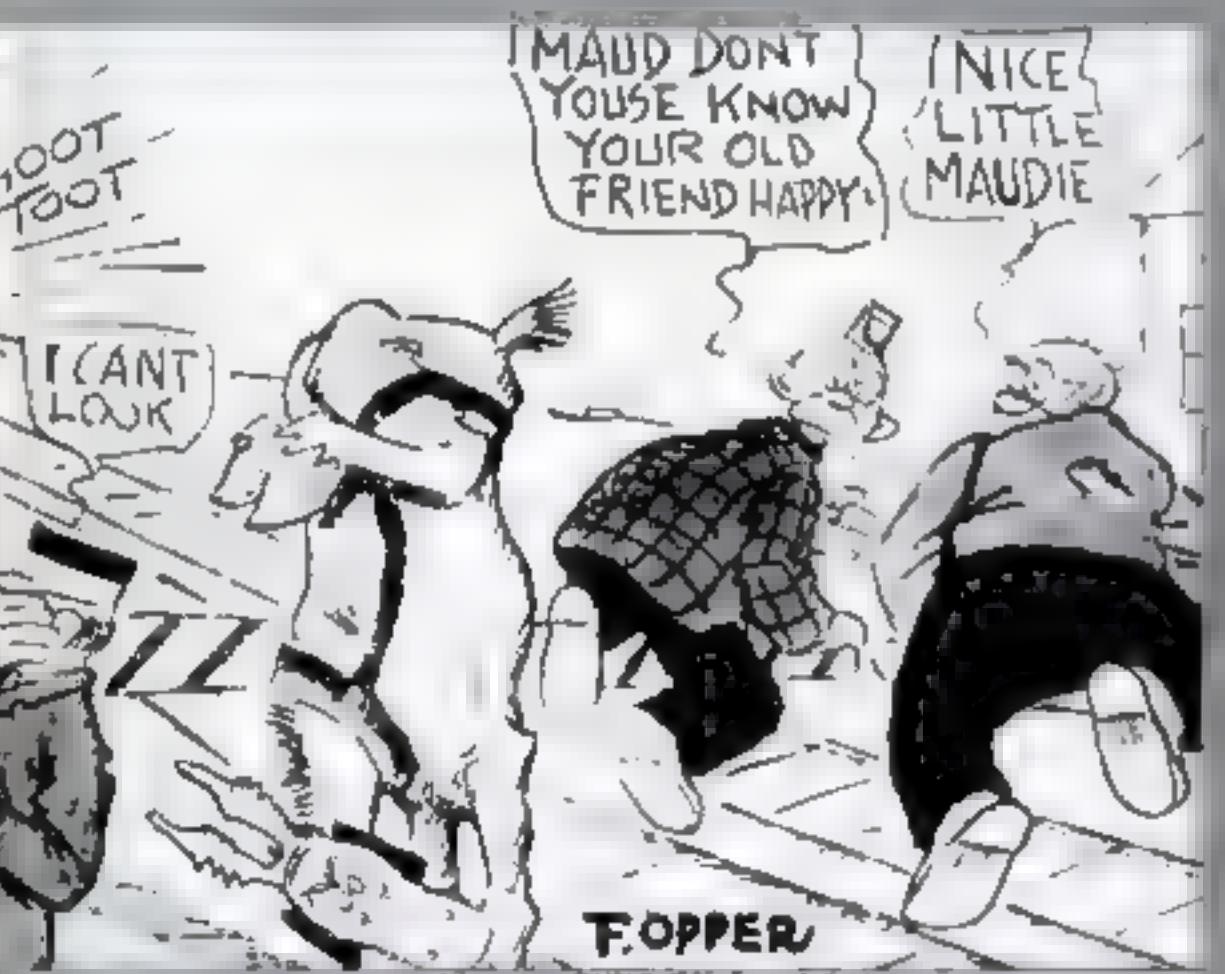
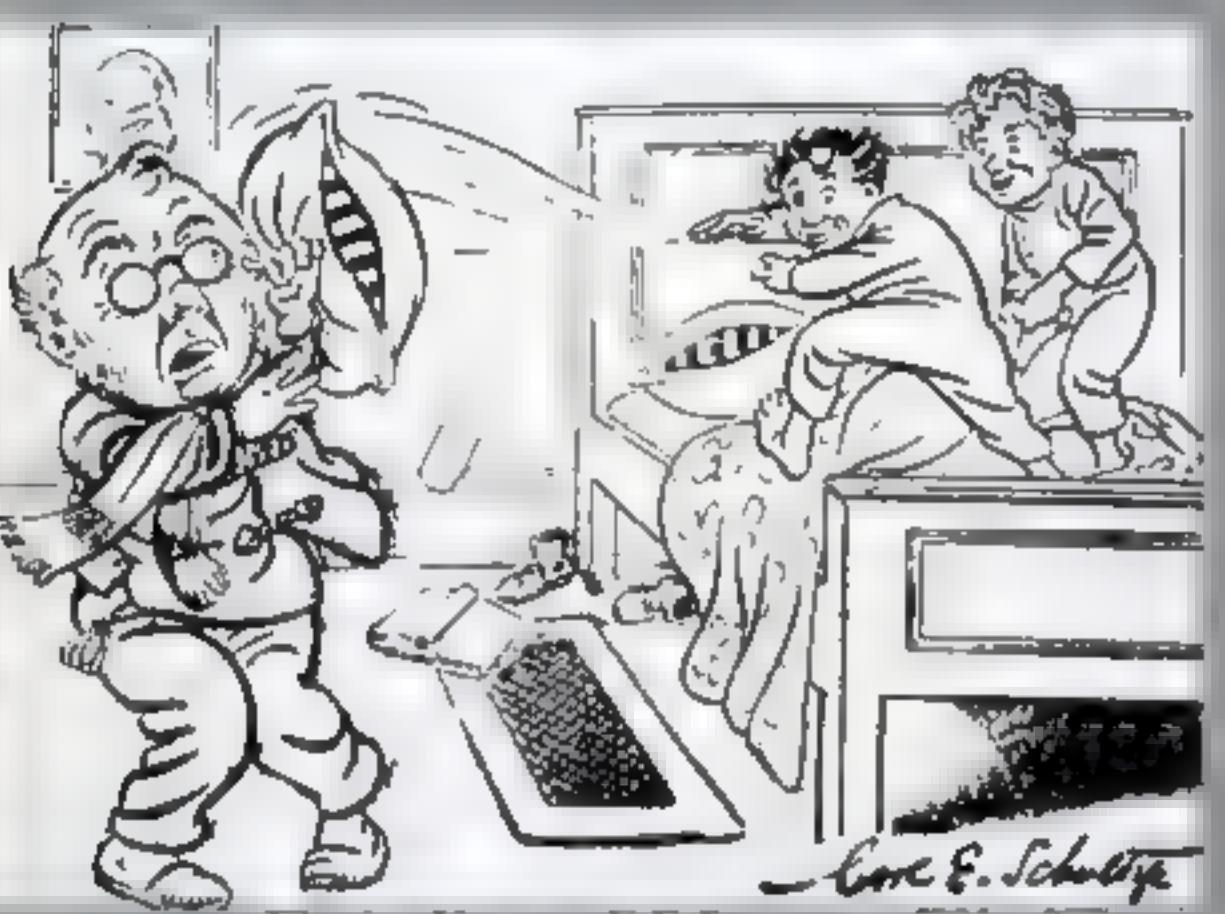
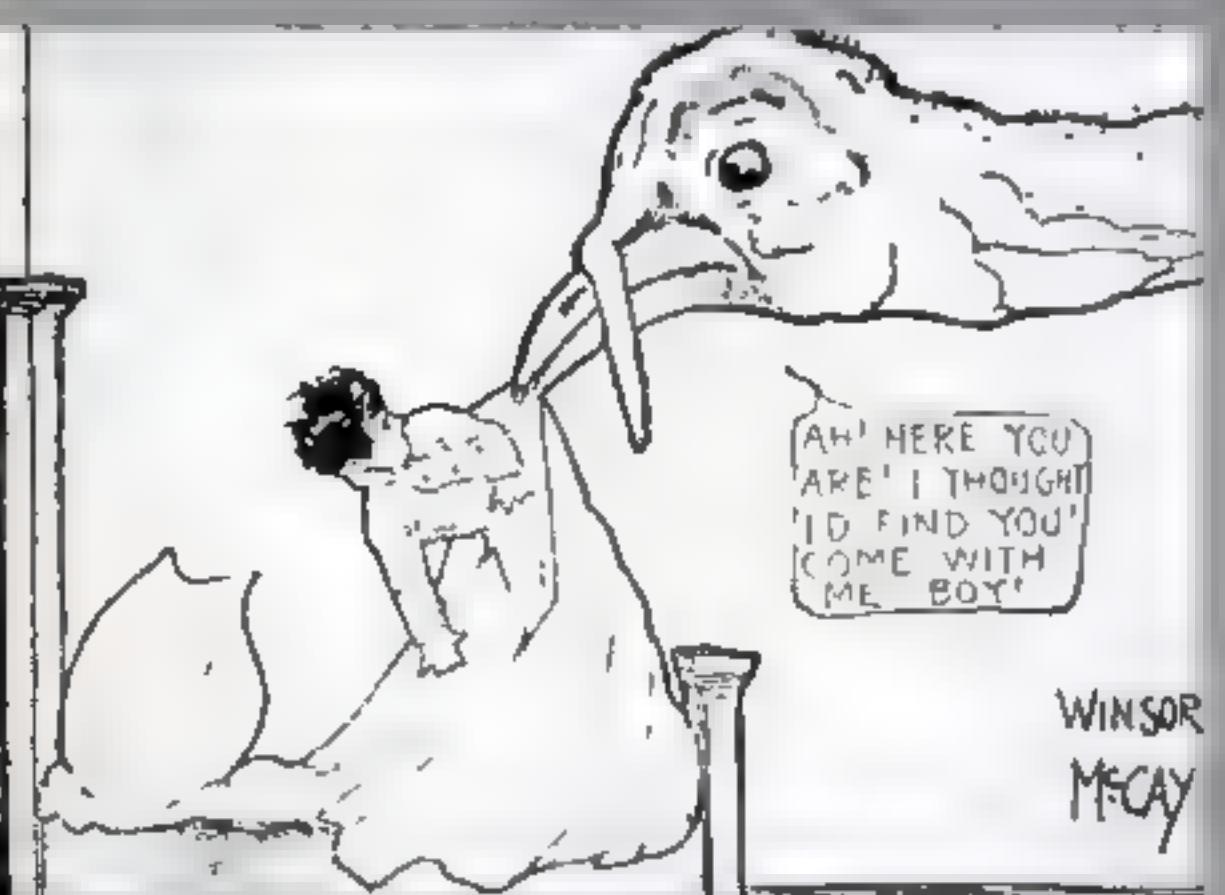
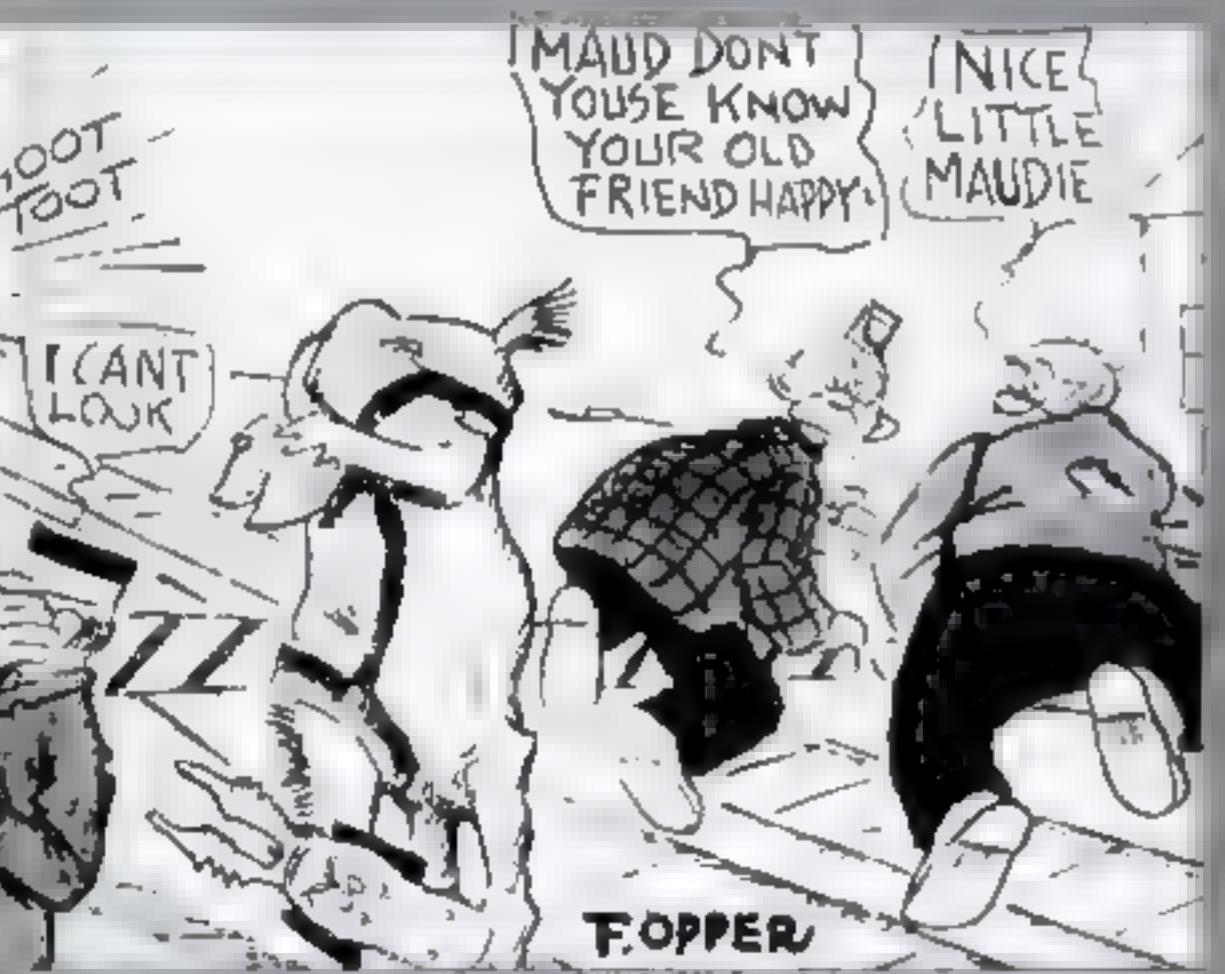
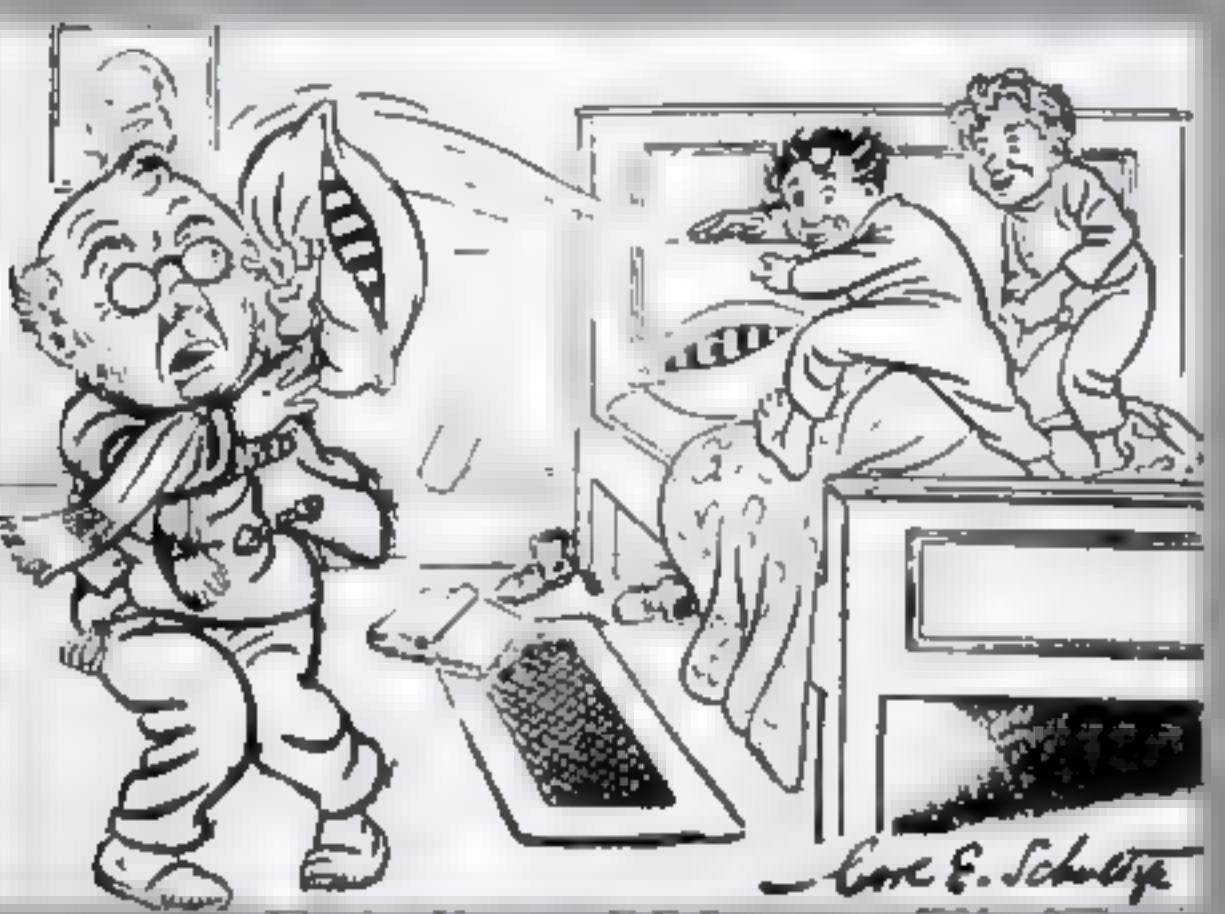
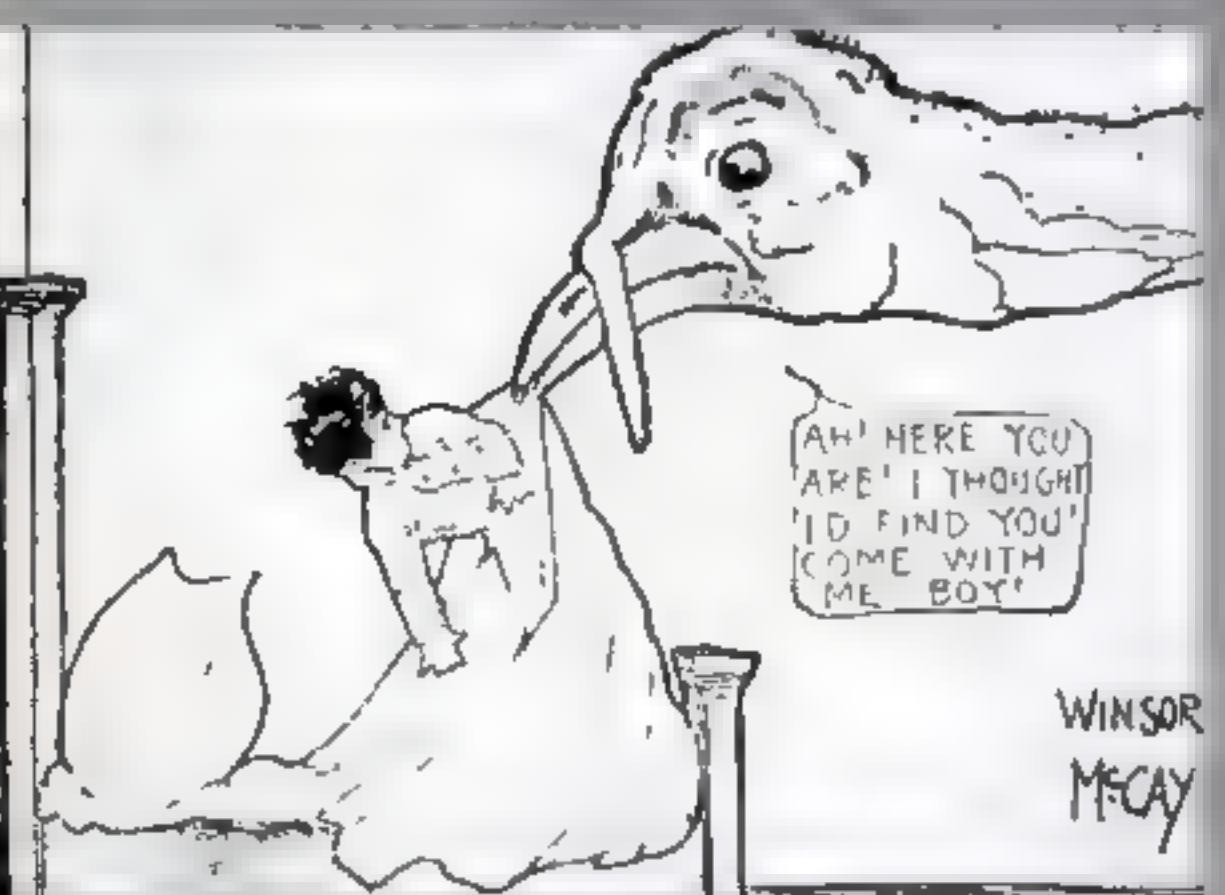
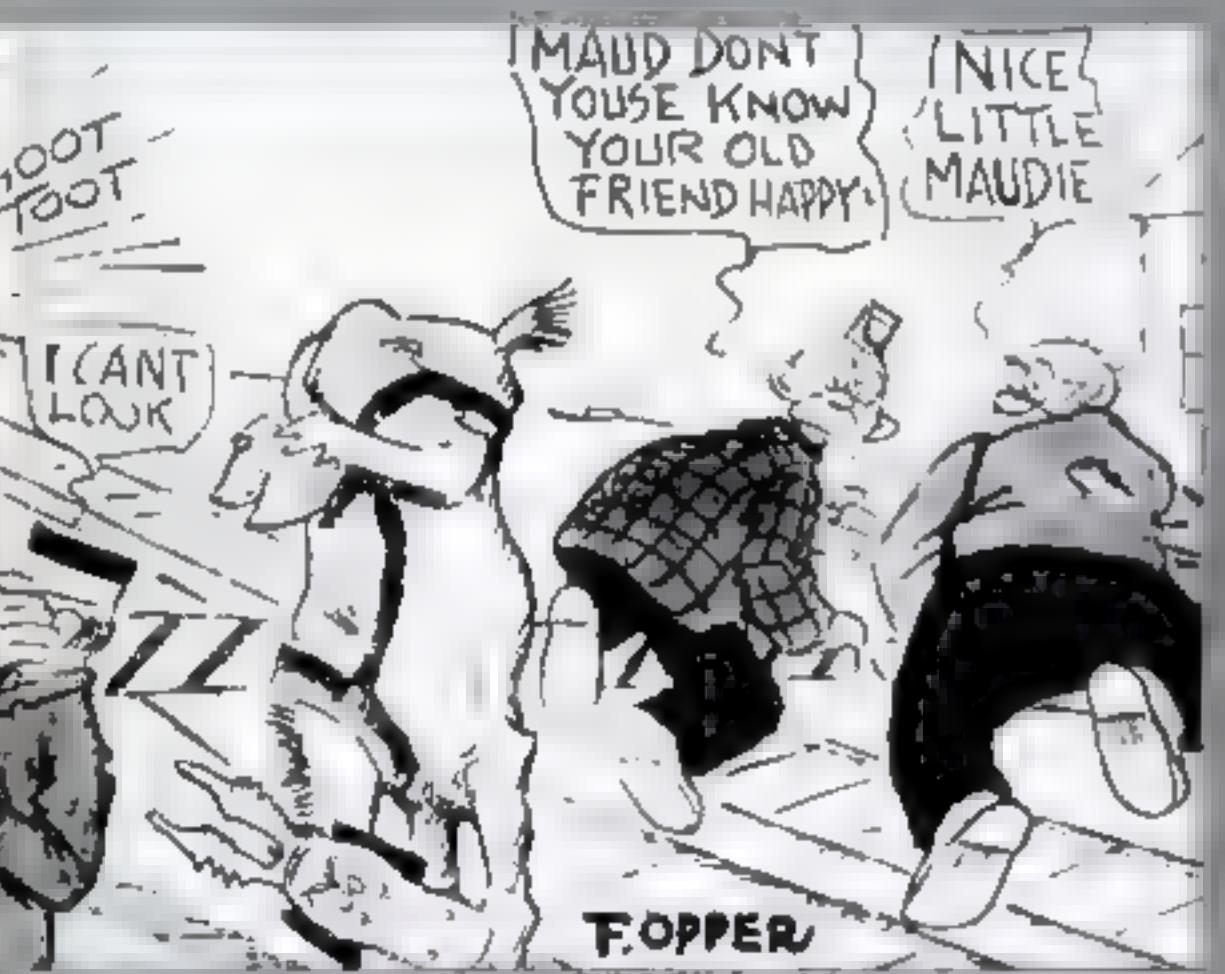
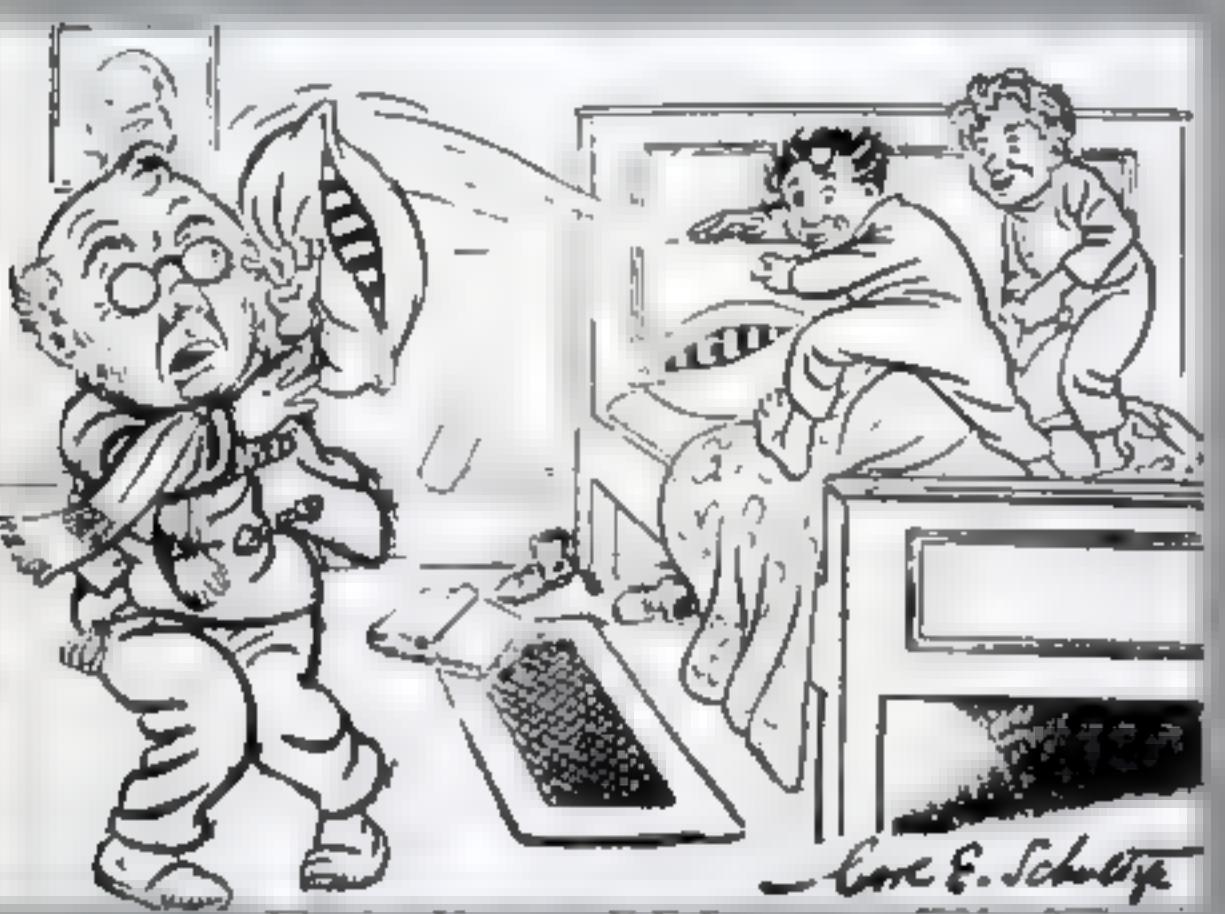
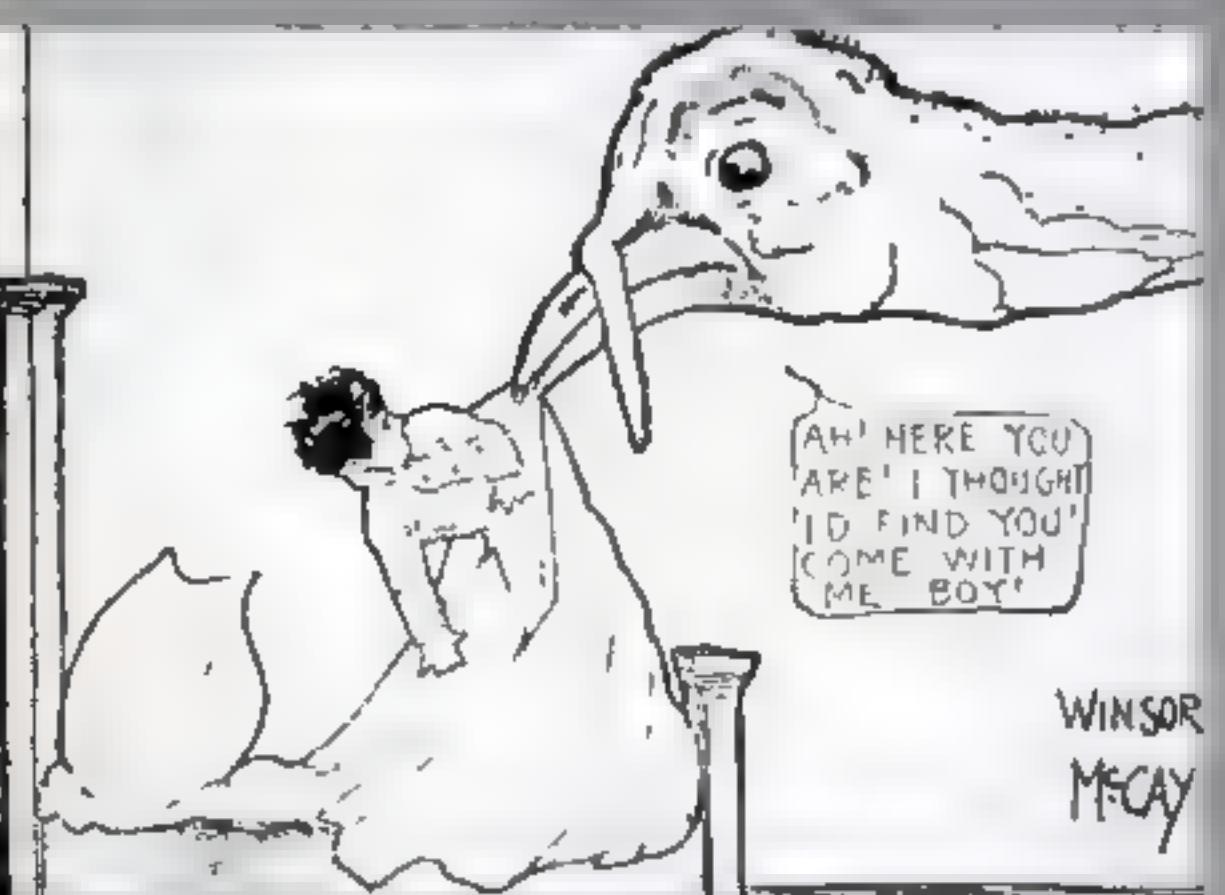
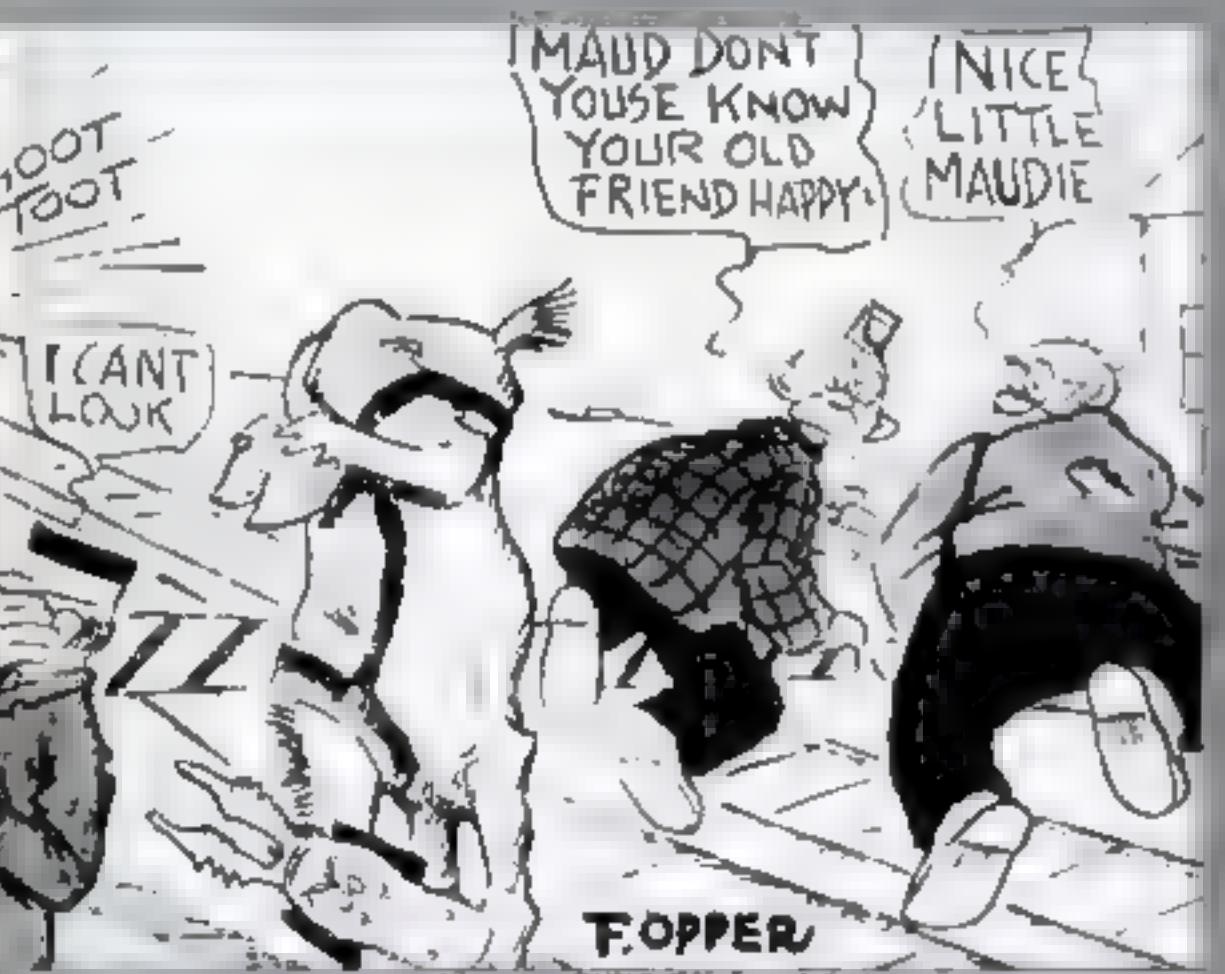
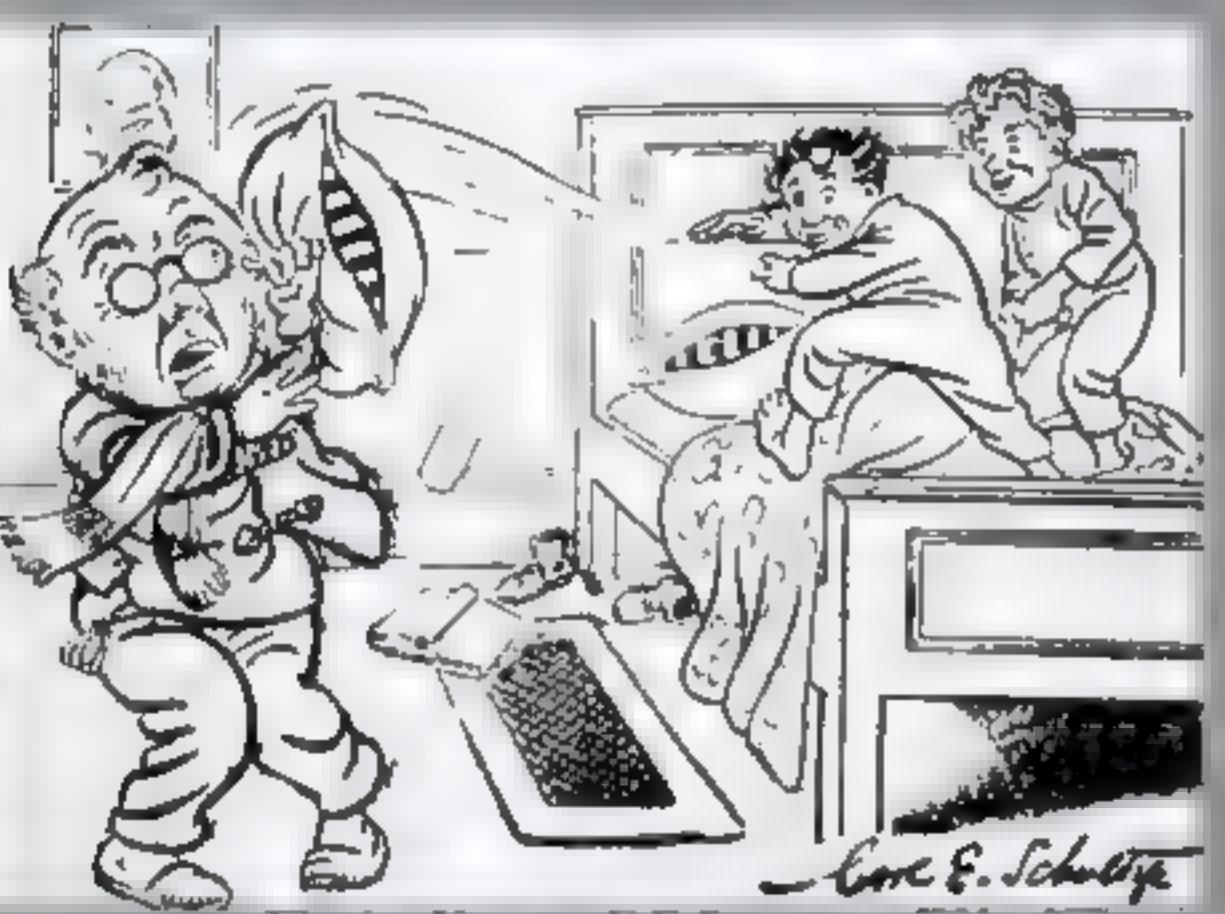
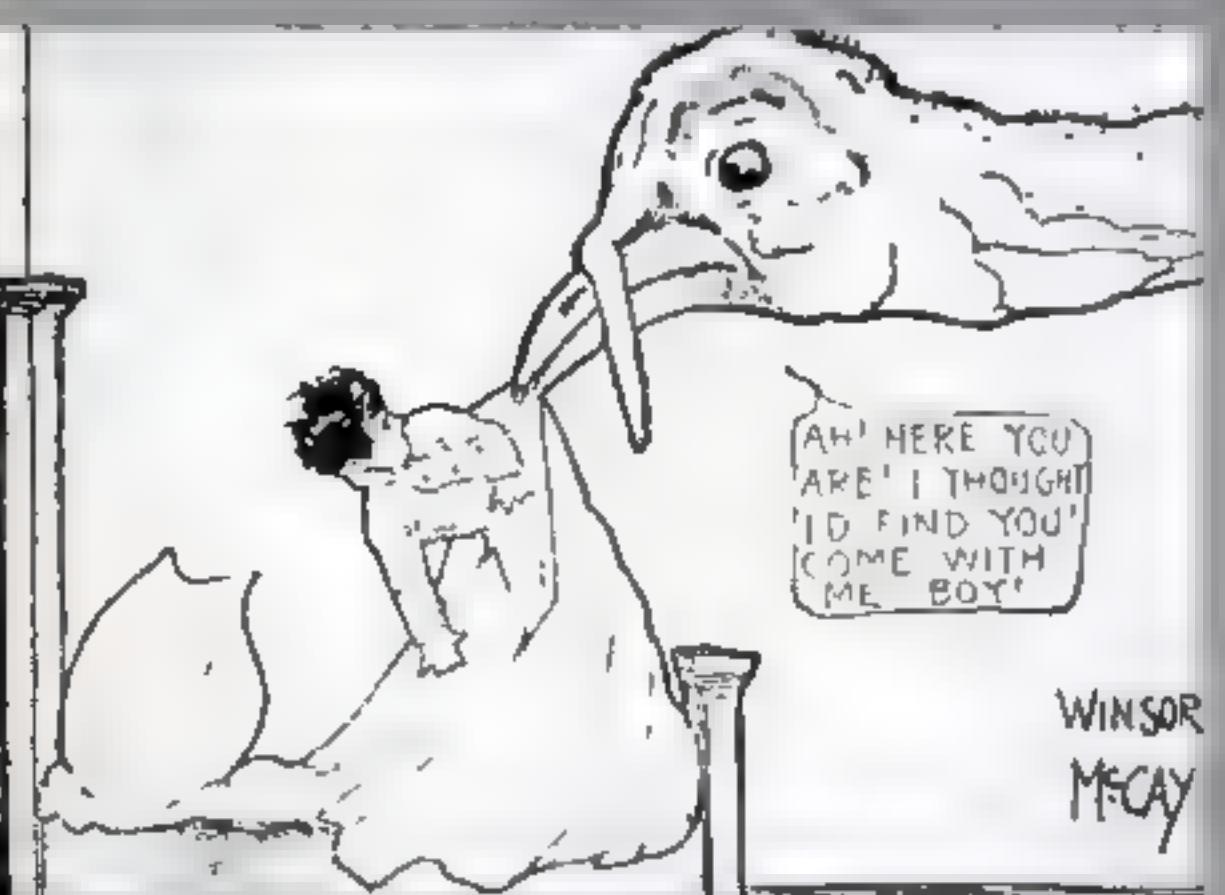
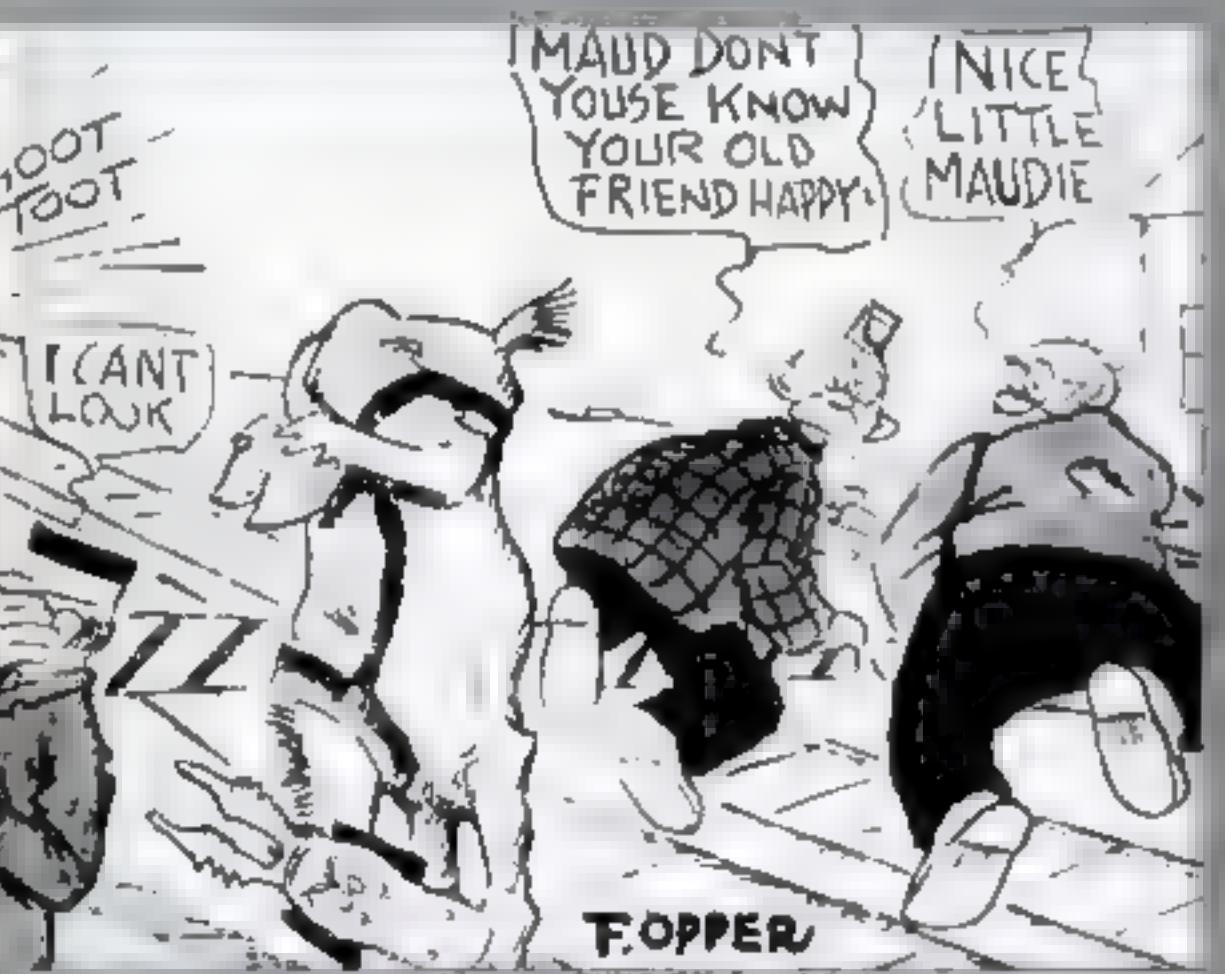
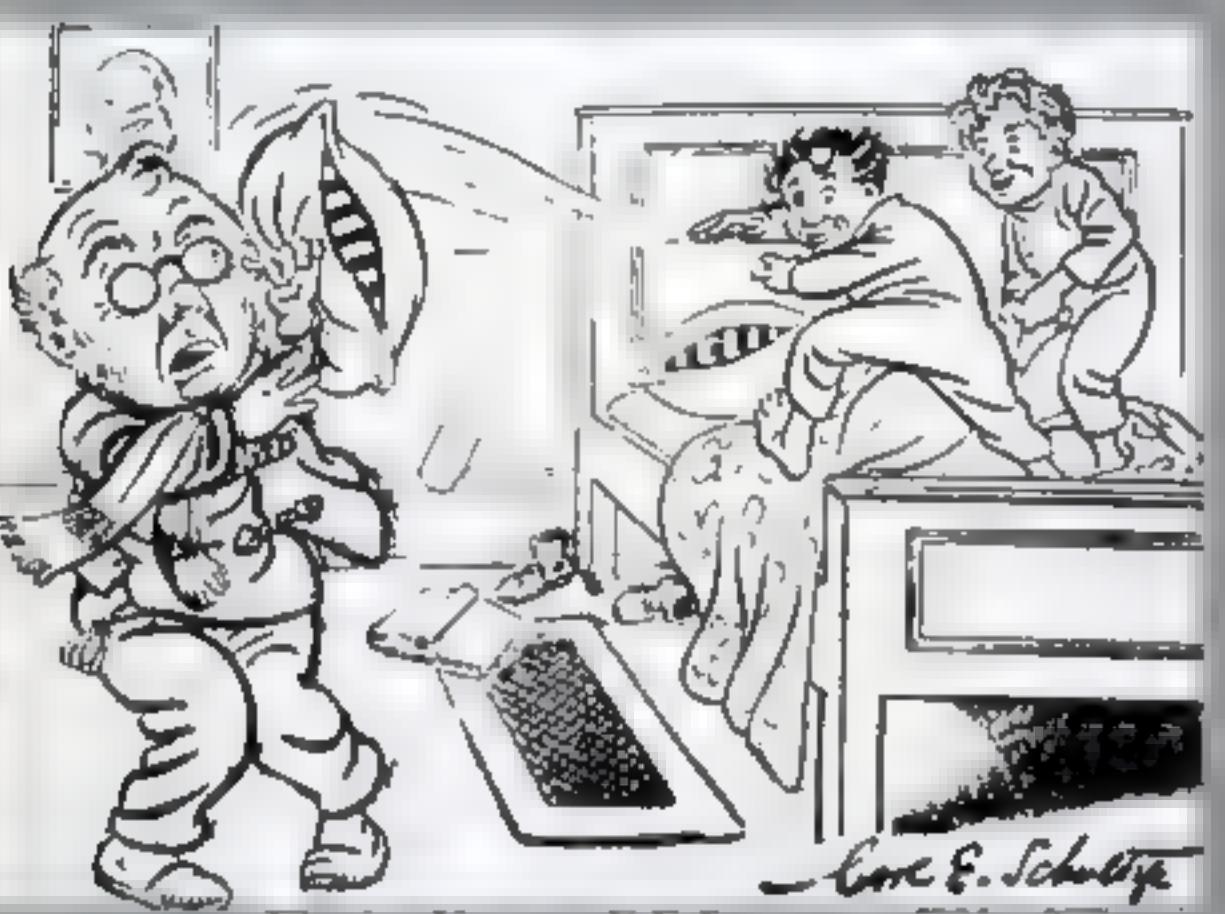
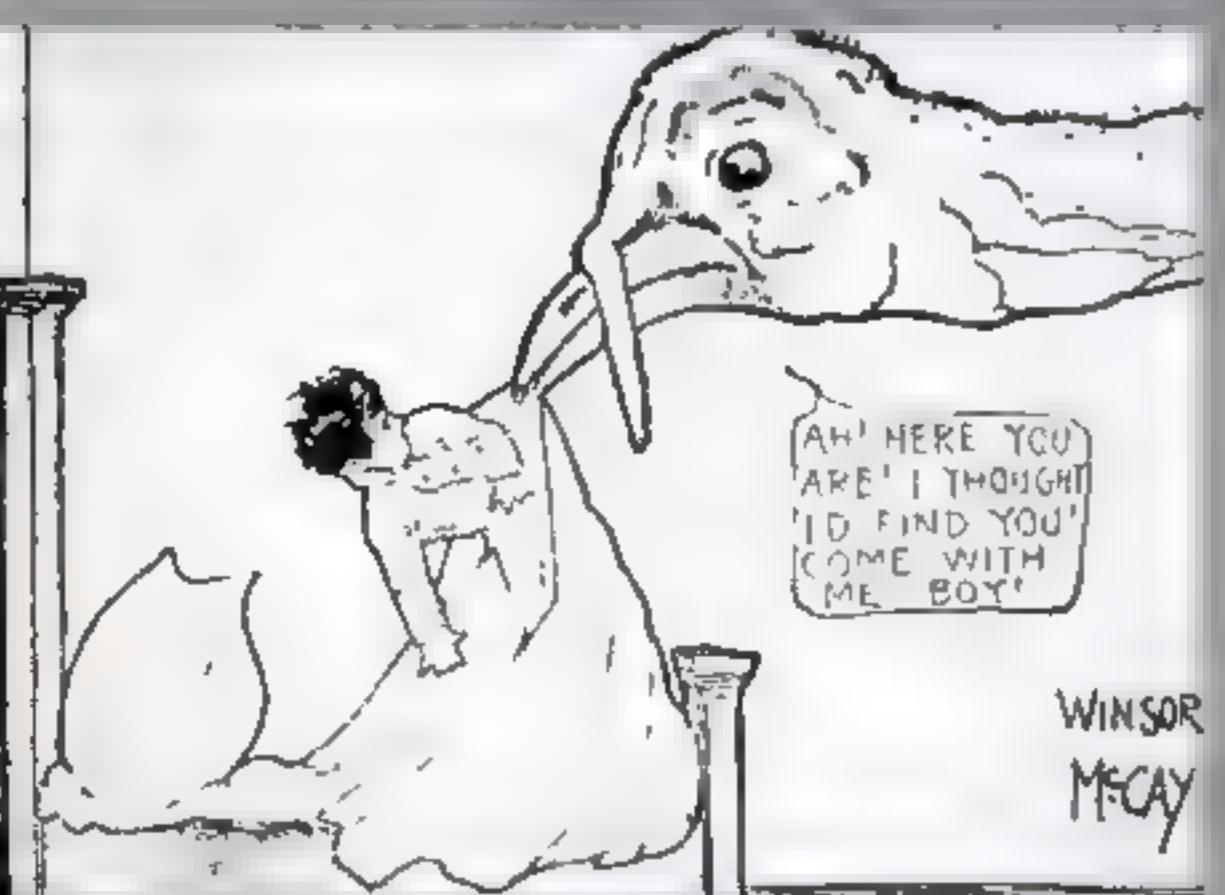
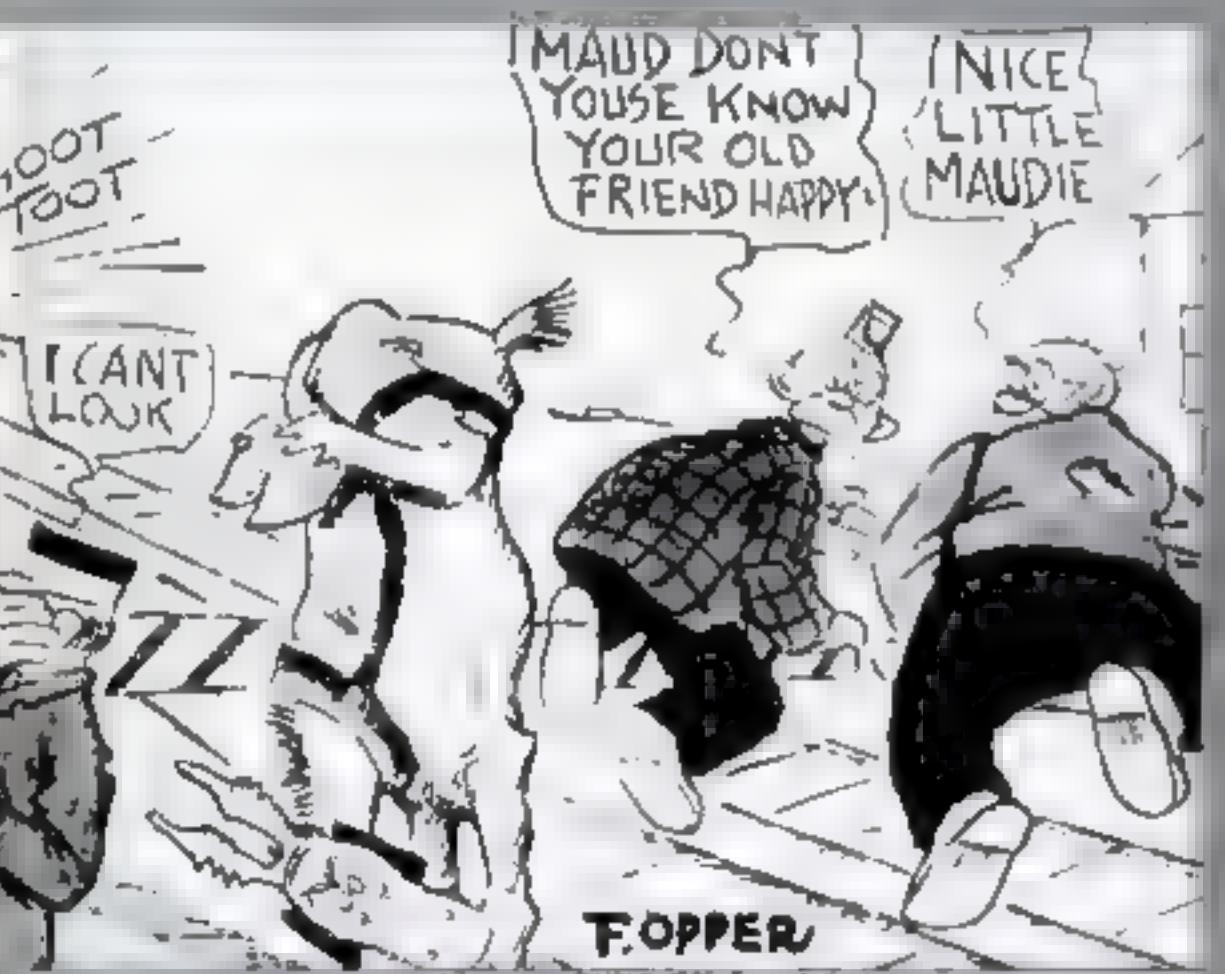
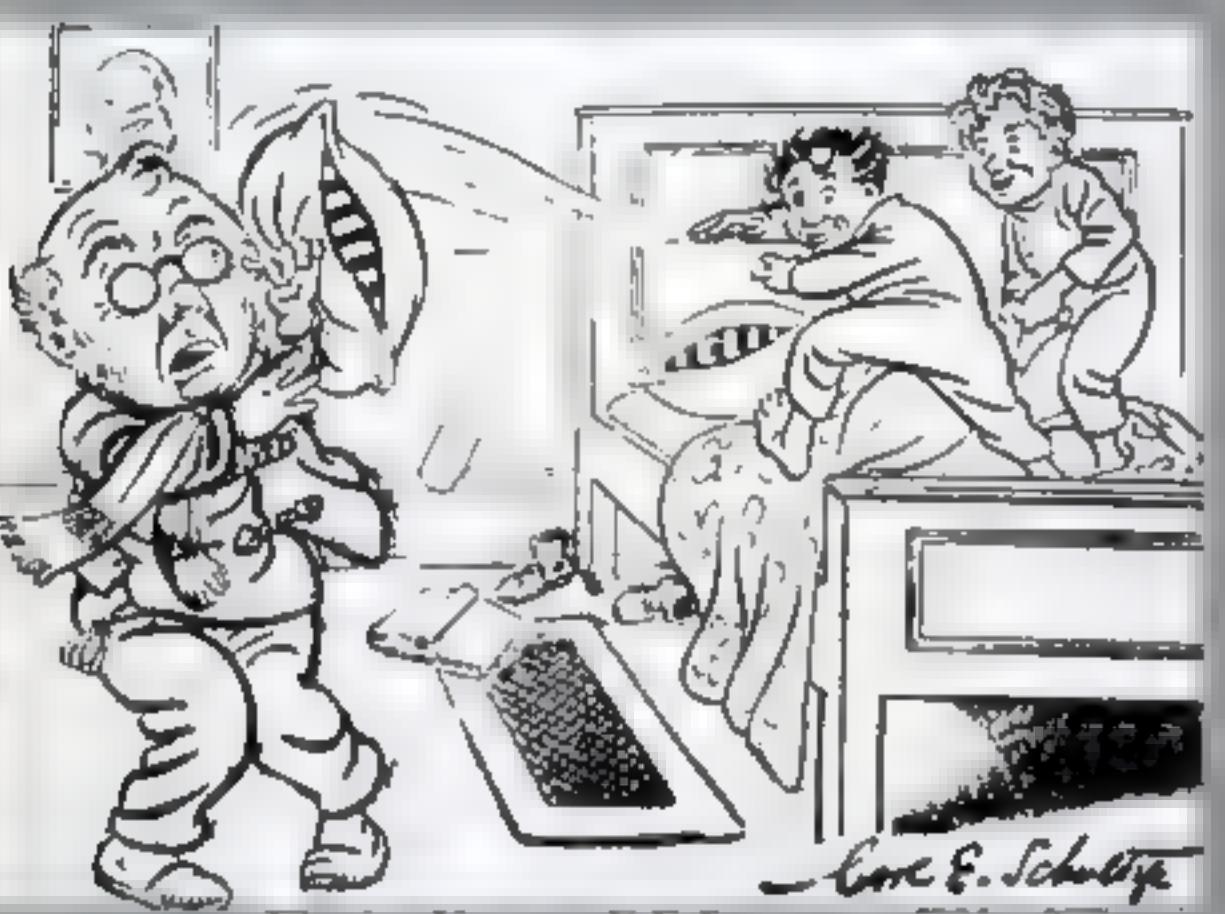
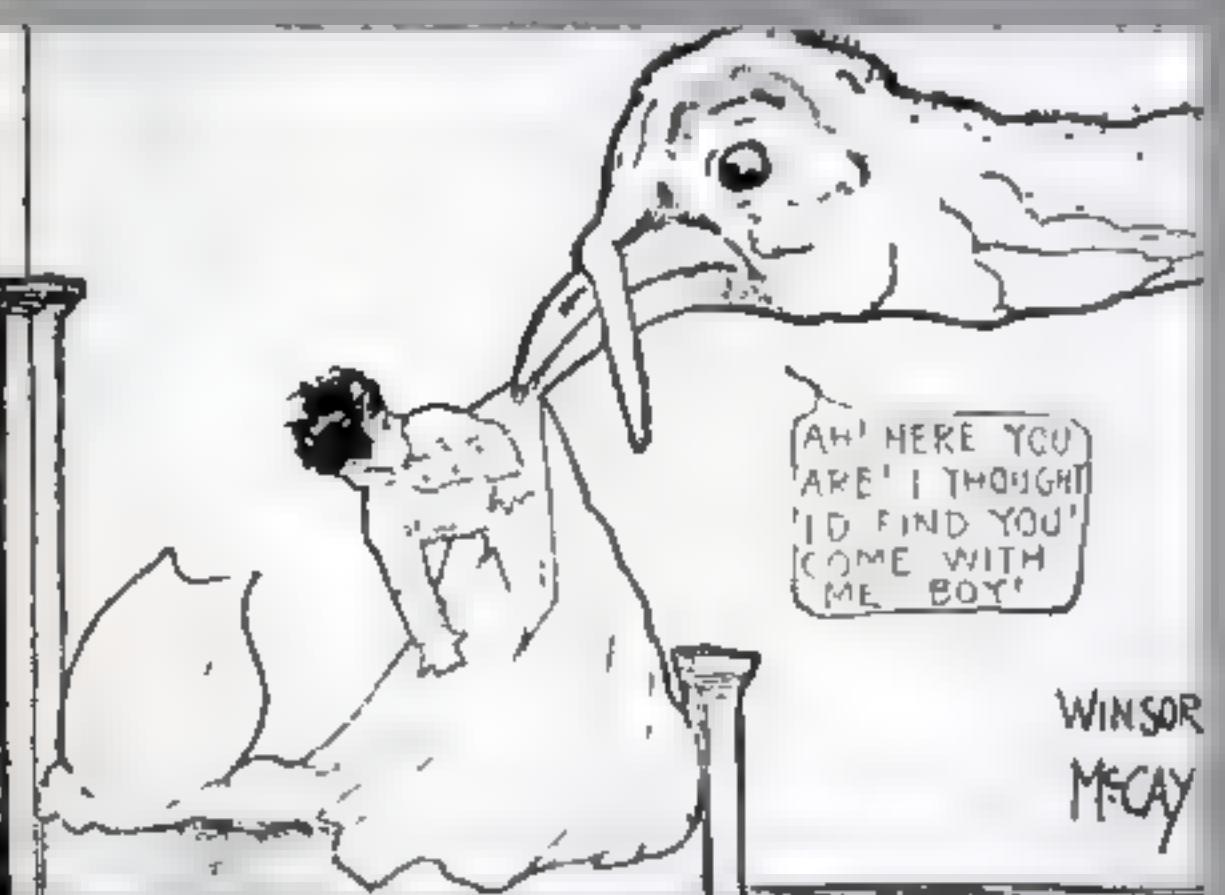
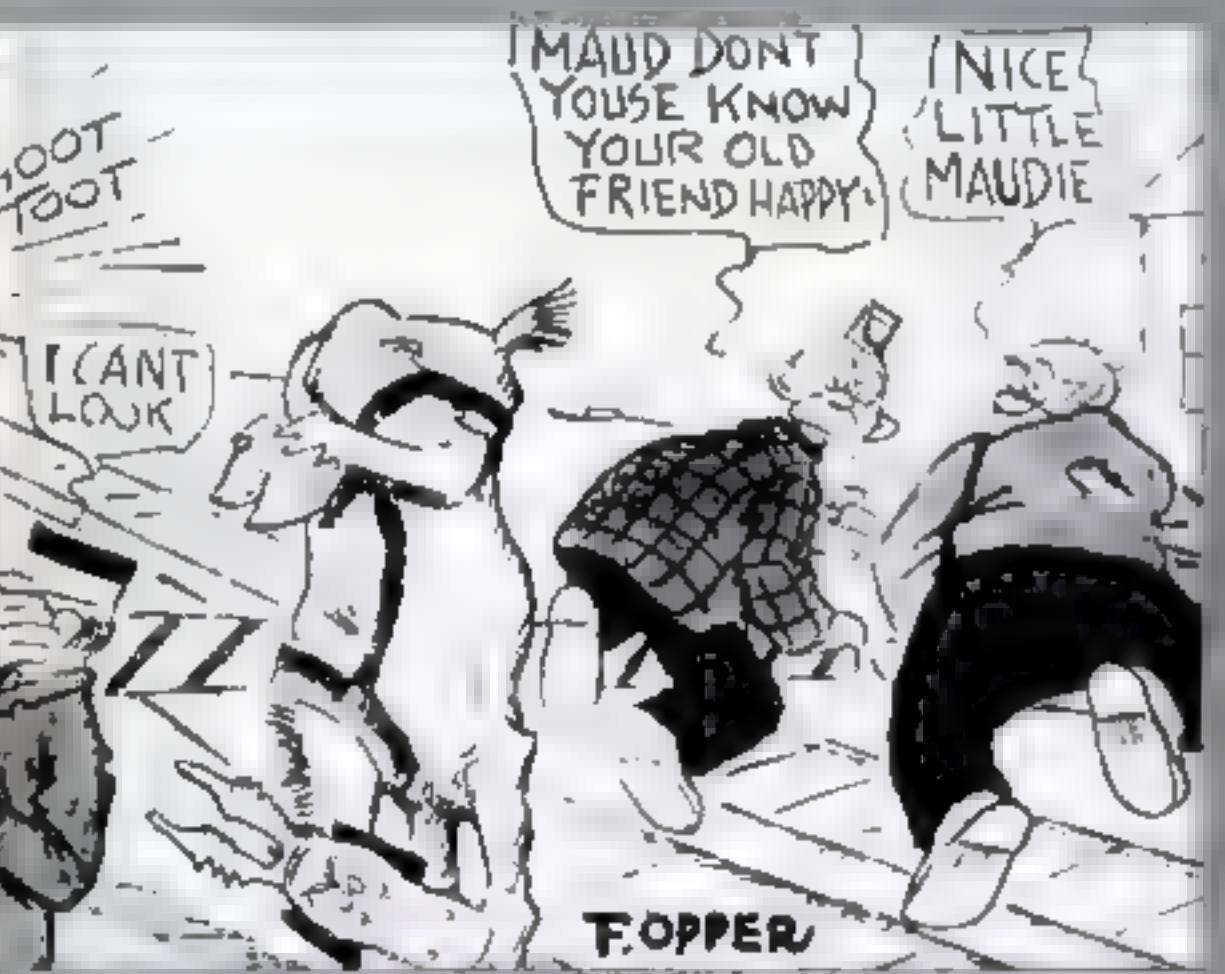
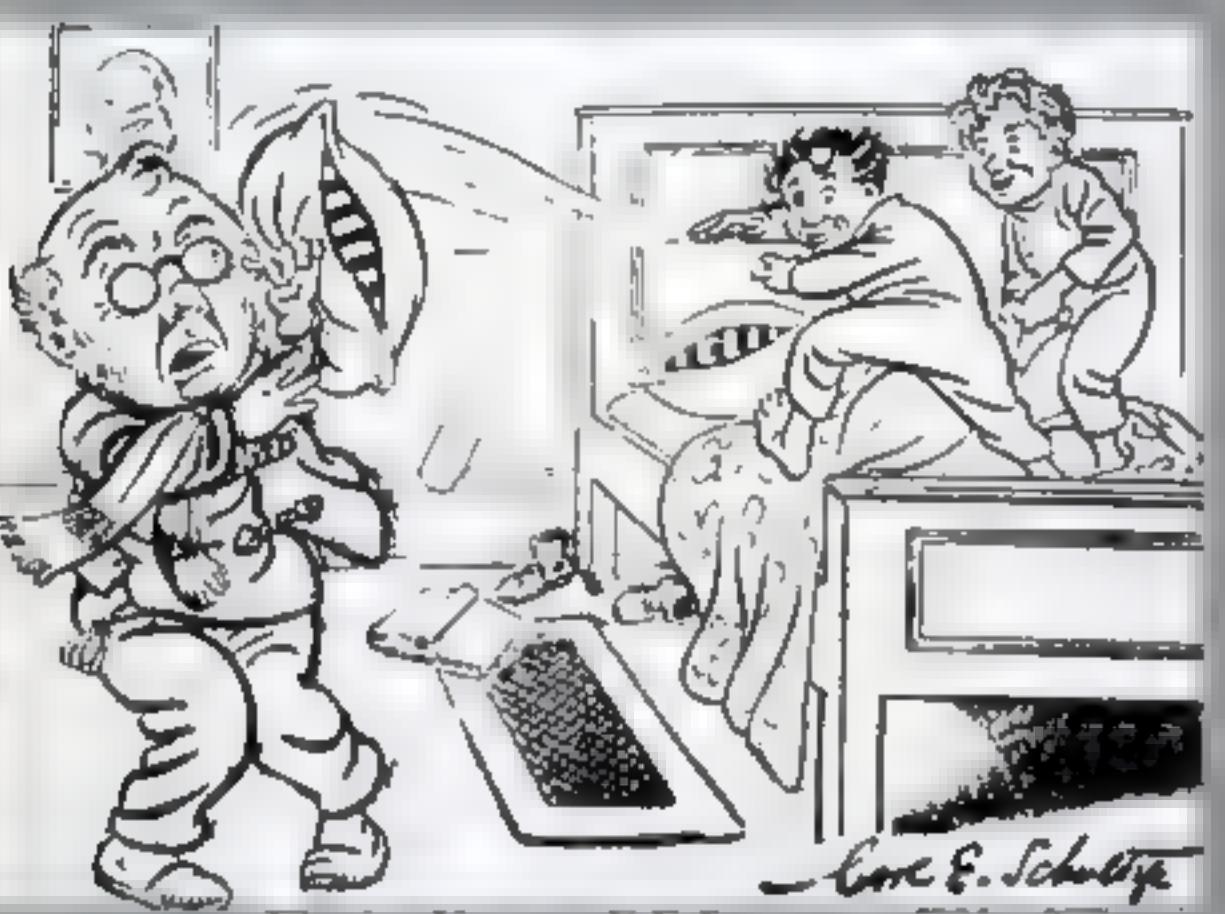
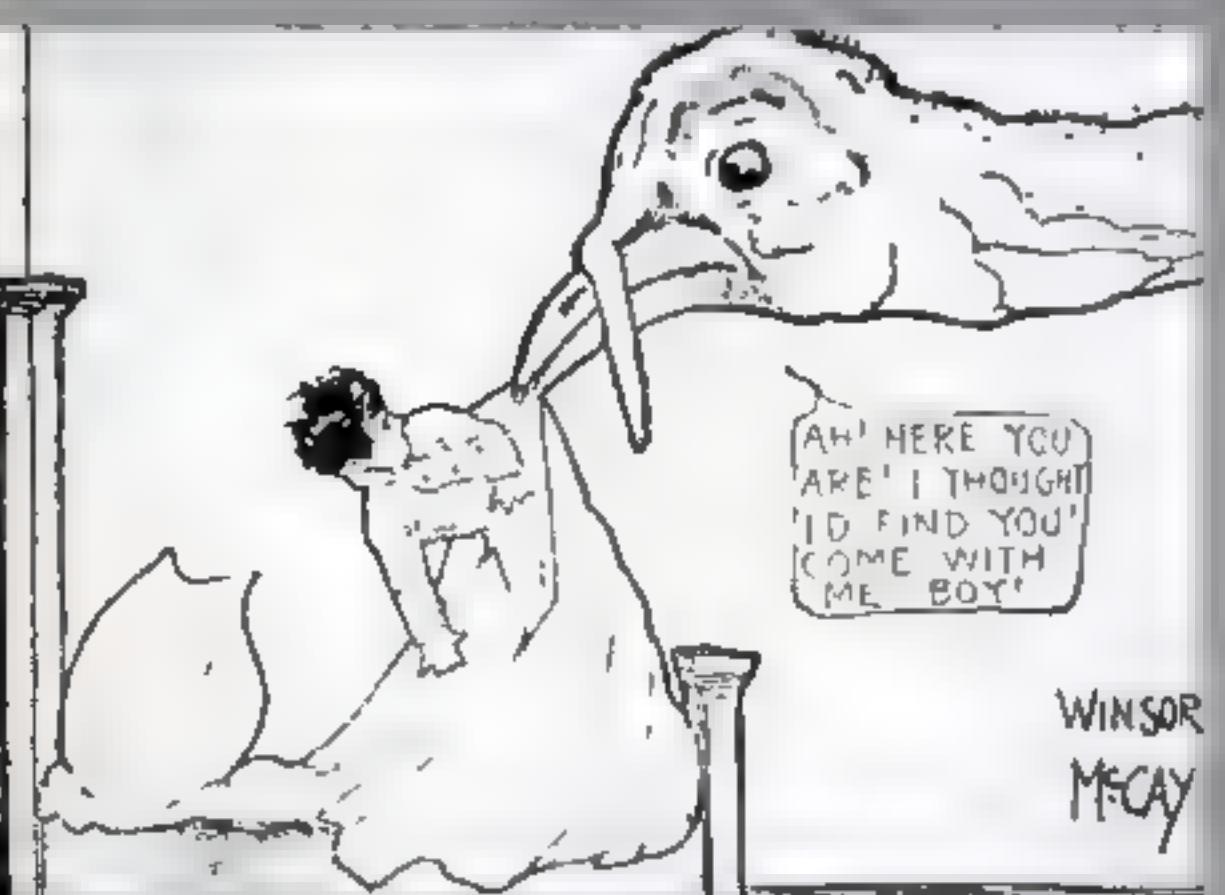
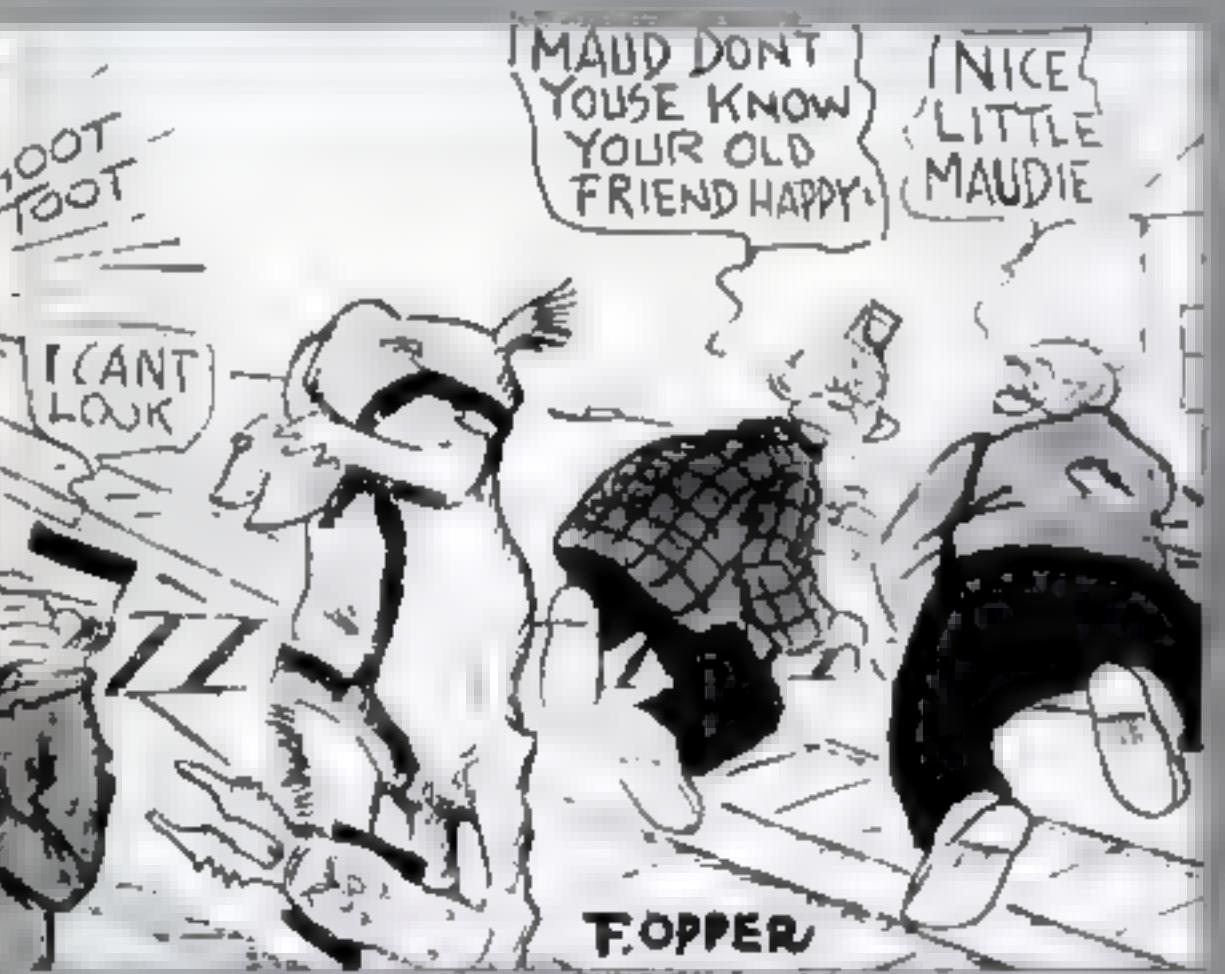
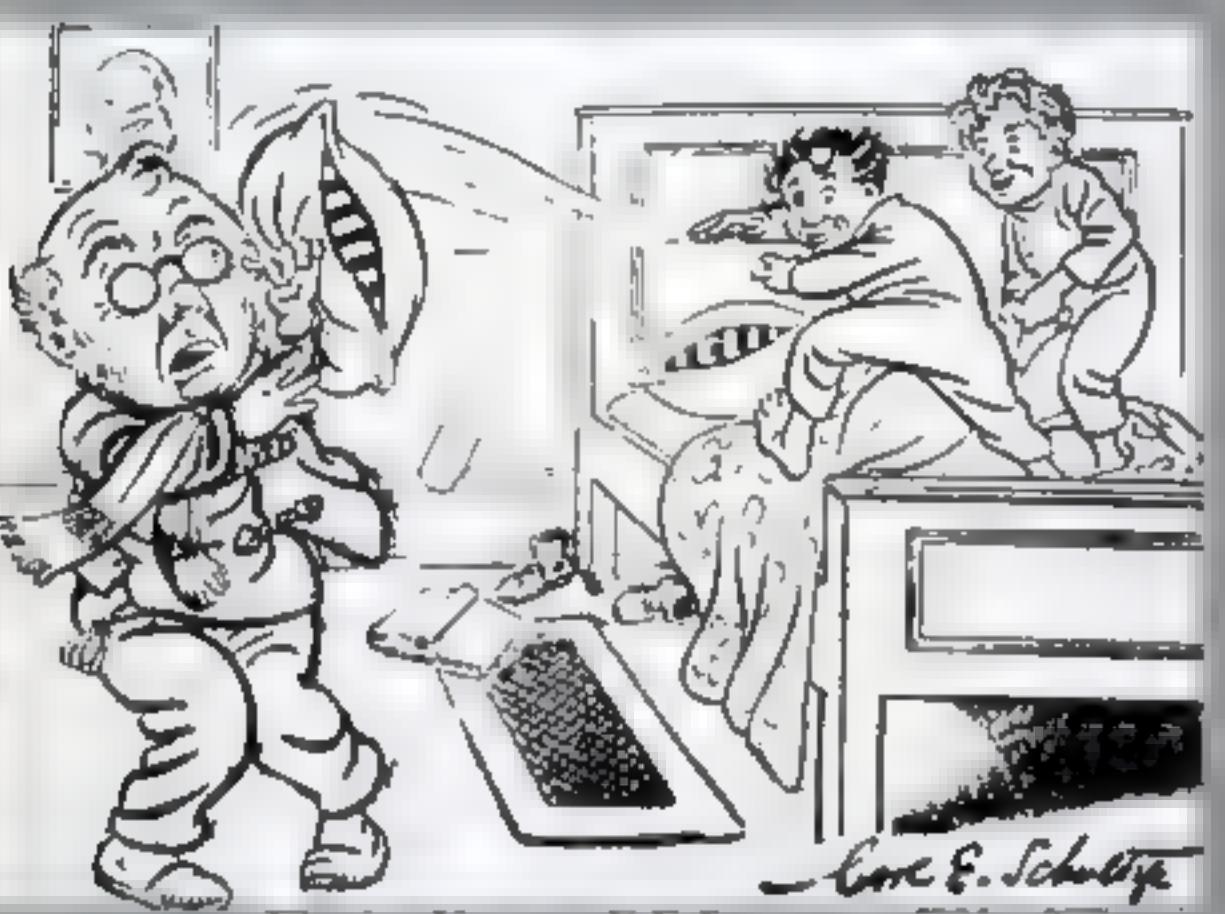
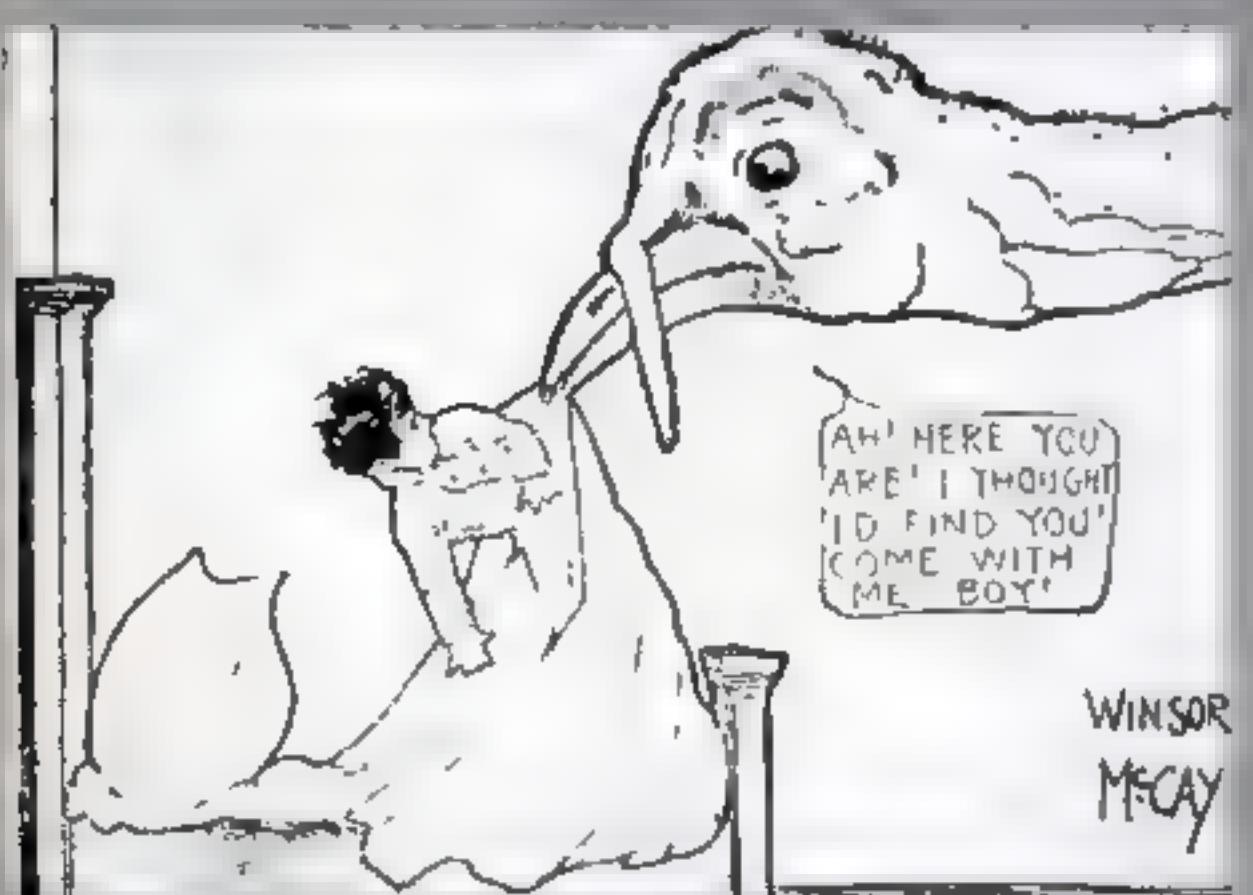
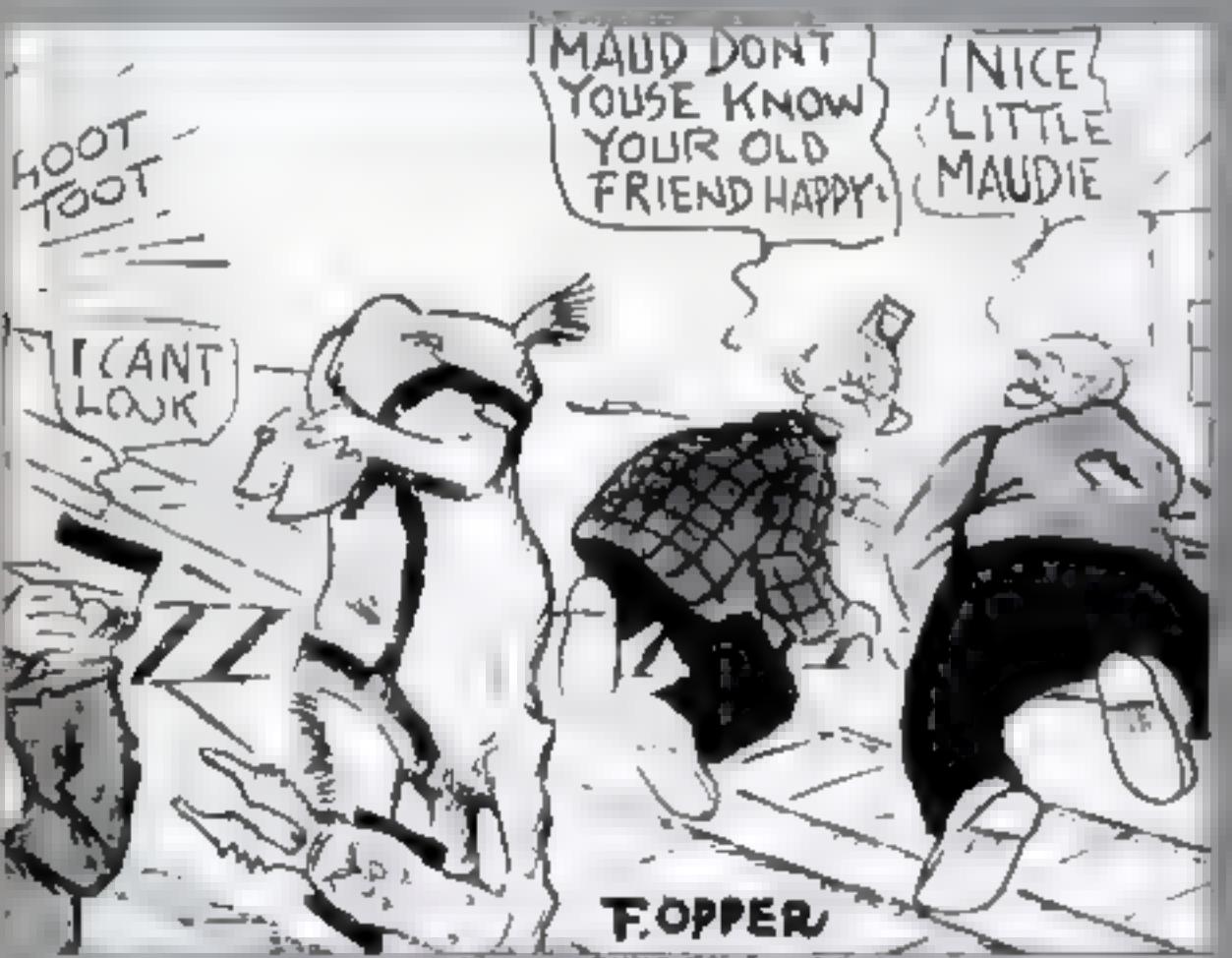
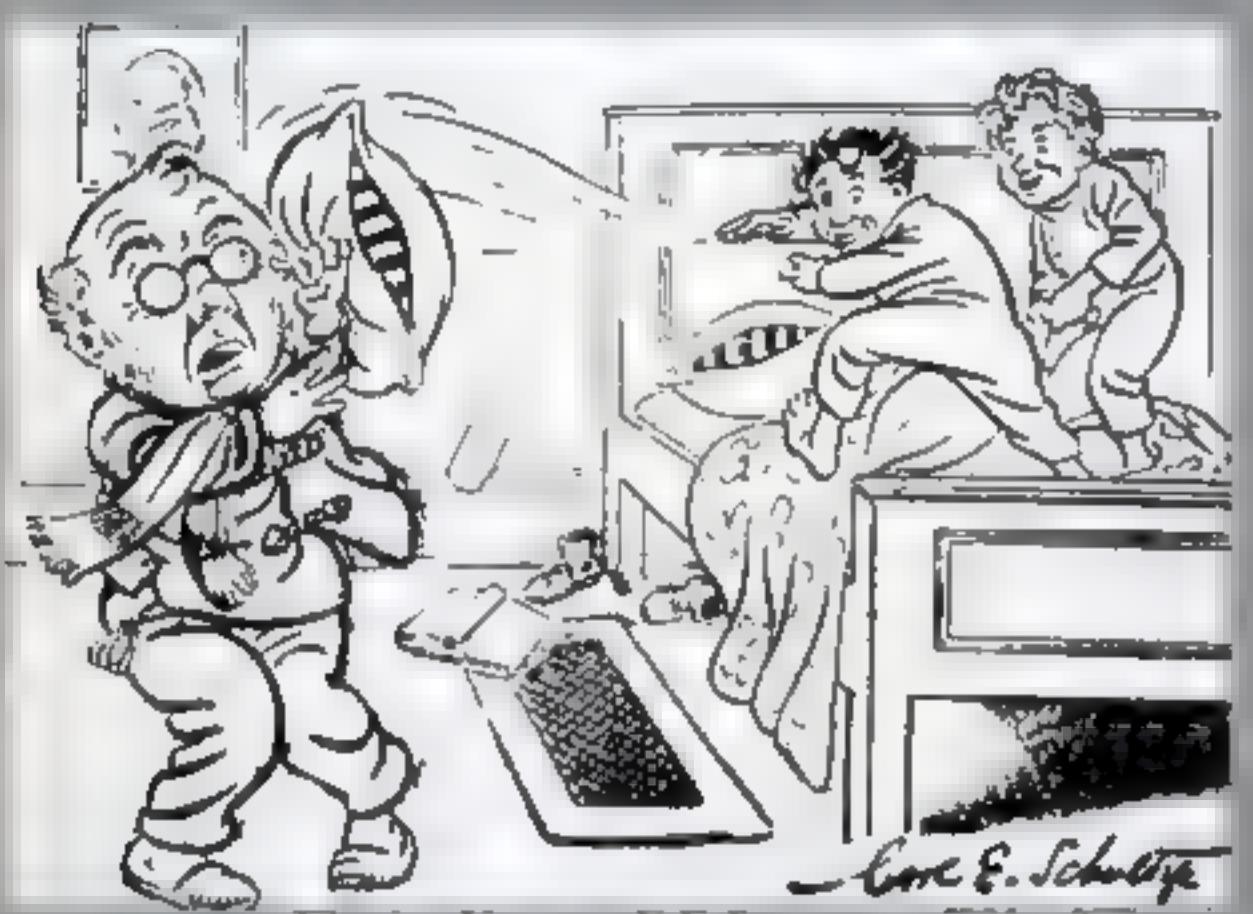
In *ten* series of non-skid tests the regular and premium-priced tires of America's six largest tire manufacturers, including new tires which have just been introduced, were tested by the famous independent Pittsburgh Testing Laboratory. Read their report below.

The new Goodrich Silvertown with the Life-Saver Tread gave greater skid resistance than any other tire tested—including not only the old-established tires of these manufacturers—some by as much as 4% to 10% higher in price—but also the new tires which were recently tested under the same road conditions.

Pittsburgh Testing Laboratory



# Goodrich SAFETY Silvertown

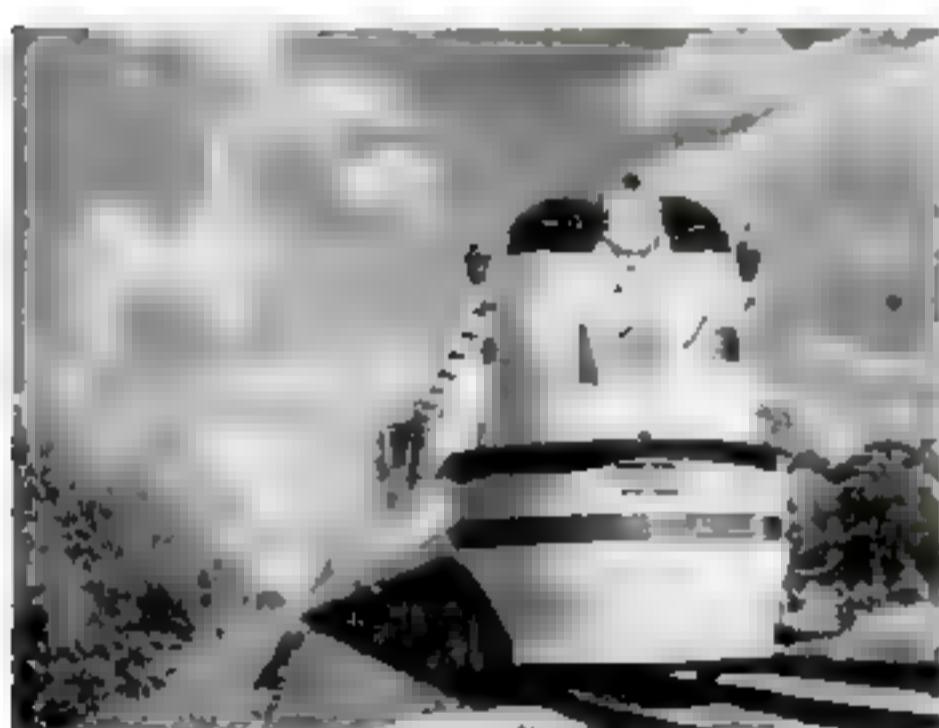


# AMERICA GETS RID OF DEADWEIGHT

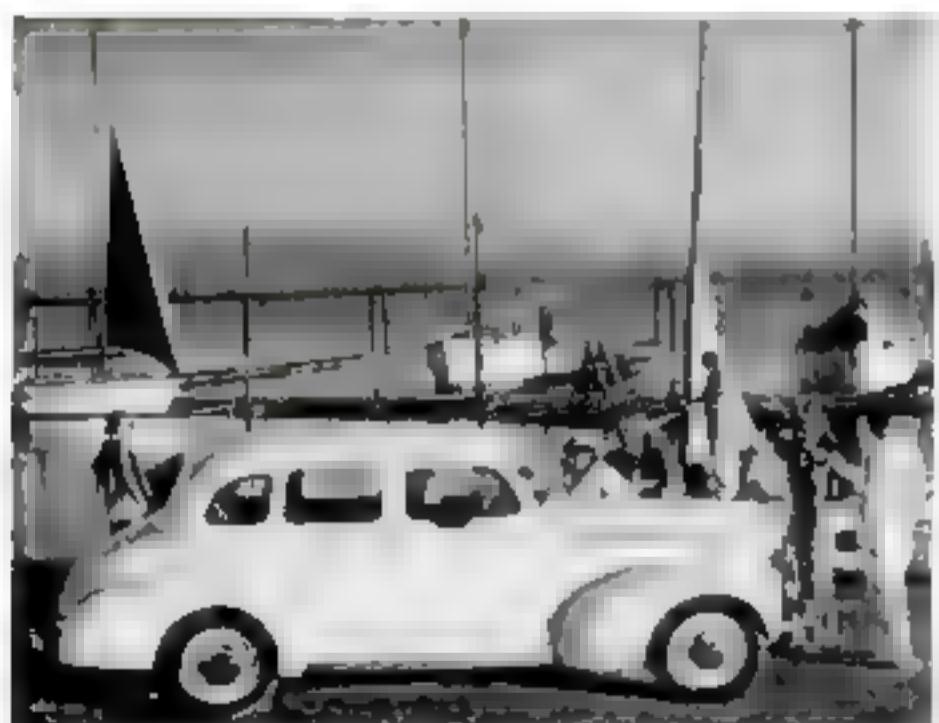
America has divorced deadweight—streamlined herself to a new efficiency. Lighter steels make better automobiles, trains, airplanes—lighter fabrics make a new type of clothing for the American male, increase his comfort and efficiency. Gone are the days of cumbersome, bulky transportation. Gone, too, are the days of boardy, heavy clothes for hot-weather wear.



Planes slip through today's skies swifter, safer than ever before—light-winged symbols of a streamlined age... proof of man's progress in modern designing.



Trains have been stripped of ponderous weight—made lighter, faster, more comfortable, cheaper to operate—and travel twice the distance in half the time!



Automobiles have been trimmed down from tons to pounds—give us a vastly better ride for a lot less money—have a sleek, smart appearance that's vastly different from the cars of ten—even five years ago.



Men's clothing of zephyr lightness—Dixie Weave (Clothing of Tomorrow® by Hart Schaffner & Marx)—gives sweltering men cool, well-tailored comfort on the hottest days. Dixie is not only a cool suit—Dixie is a summer suit that actually keeps its shape and holds its press! Reason: Dixie is *all-wool* Wool, in summer weights, is cool. And it never gets "clam-

my," for its porosity permits air to circulate near your body. Dixie gives you smart, crisp coolness in a suit that's out of the mussy "summer suit" class—at a moderate price! See Dixie at the store in your town that features Hart Schaffner & Marx clothes—and at the Clothing of Tomorrow® exhibit at the World of Tomorrow—the New York World's Fair



Fred Perry



Joe DiMaggio



Johnny Weissmuller



Walter Hagen

Going to the World's Fair? VISIT... *Man—His Clothes and His Sports*—one of the most interesting and unique exhibits at the Fair. SEE... Hart Schaffner & Marx "Clothing of Tomorrow®" displayed in an unusual setting by the greatest names

in sport—including Fred Perry, Walter Hagen, Joe DiMaggio, Johnny Weissmuller, and a number of others. HEAR... these famous stars personally voice for you their own reactions to this sensational new "Clothing of Tomorrow."

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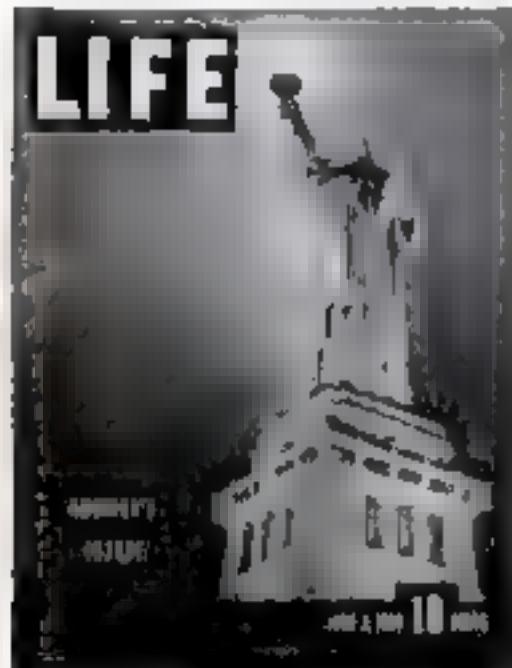
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**LIFE'S COVER.** To all the world the Statue of Liberty is the true symbol of America. In the 63 years she has stood on Bedloe Island, 26,000,000 new Americans have been guided by her torch to what was for so long, and must be again, the Land of Opportunity. It is fitting enough that in these days when the light of freedom burns ever lower in Europe, Liberty stands out with new brightness against the American sky. The Government has repaired and refurbished the statue, installed floodlights. For a glimpse of Liberty's history, see page 35.

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MANAGING EDITOR John Shaw Billings

ASSOCIATE EDITORS: Daniel Longwell, Wilma Hicks

PHOTOGRAPHERS: Margaret Bourke-White, Alfred Eisenstaedt, Bernard Hoffman, Thomas D. McAvoy, Hansel Mieth, Carl M. Mydans, John Phillips, Peter Stackpole, William Vandivert

ASSISTANT EDITORS: Hubert Kay, David Coct, Paul Peters, Joseph J. Thorndike Jr., Joseph Kastner, Andrew Heskell, Lincoln Barnett, Maria Sermolino

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## In an important meeting, watch the man who smokes a pipe

**H**e will say little. But when he speaks, he is heard and liked as not the decision will rest on the few remarks he makes. For men respect the calm, quiet judgment of the pipe smoker.

Many such smokers, scores of thousands of them all around the world, fill their pipes from the Edgeworth tin. For that famous blue tin has earned the deep respect of all pipe smokers. Ask any ten men, or any ten tobacco dealers what tobacco they consider the finest on the market and don't be surprised if the majority say Edgeworth.

For judged by any standard—judged by what goes into it, or judged by the satisfaction and pleasure it gives to the pipe smoker, Edgeworth is America's Finest Pipe Tobacco. What goes into it is the finest tobacco leaf grown in this country. Such leaf costs more to buy, just as a fine watch costs more, but it's worth what it costs.

When you judge Edgeworth in your pipe, you have the ultimate test. It opens your eyes to the greatest smoking contentment there is. For Edgeworth smokes cooler, gives you a flavor, mildness and fragrance that make men call it "precious Edgeworth". In fact, in some distant countries men gladly pay as much as 70¢ for that same famous blue tin that you can buy at your dealer's for 15¢, so you see smoking even the finest pipe tobacco costs very little.

### Our Plan for Young Men Who Hanker to Smoke a Pipe

To give you *veteran* pipe smoking pleasure from the very first puff, we send you our Edgeworth Sampler Kit with trial packets of the 3 styles of Edgeworth. And, only to show you how grand Edgeworth is when smoked

in a pipe not saturated with foreign flavors, we have included a pipe, by Linkman, which has been filled with Edgeworth and smoked by machine four separate times—already "broken in"—sweet and gentle from the start. Then, for a personal touch, your own signature or a gift message is engraved in gold color on the pipe stem. Complete Kit, \$1.00.



LARUS & BRO. Co., Dept. K  
Richmond, Va.

Enclosed please find \$1.00 (in Canada \$1.50 Duty Paid) for your Edgeworth Sampler Kit . . . Opposite is my signature to engrave on the stem of the pipe. (Please print clearly your name and address below.)

SIGNATURE OR MESSAGE

Please write your normal signature or message clearly within exact space allotted

Name \_\_\_\_\_  
City \_\_\_\_\_ State \_\_\_\_\_

PLEASE SEND US YOUR DEALER'S NAME AND ADDRESS

Dealer's Name \_\_\_\_\_  
City \_\_\_\_\_ State \_\_\_\_\_



## The Good Green Earth



**H**EINZ finds a place where the good green earth is bountiful, where the summer sun conspires with the soil and rain to yield finer harvests, we settle down and become a part of the community.

For in making Heinz foods there is always a race against time to capture flavor at its peak.

We prefer not to buy vegetables in the open market. All Heinz tomatoes, for instance, must be grown from our own seedlings. These plants have been crossbred and cultured for over 50 years, resulting in superior tomatoes for Heinz and profitable harvests for the grower.

There are Heinz kitchens in many places. Located always near the fields where the soil is rich

and fruitful, these kitchens become great food centers around which revolve the economic lives of thousands of people. Farmers grow their finer produce with the help of Heinz agricultural experts. Entire cities contribute to the goodness of Heinz 57 Varieties. The local banker, the postmaster, the doctor, the men at the railroad station, the waitress in the restaurant—all have a direct interest in Heinz. In these fine American communities, living conditions are excellent, taxes low and relief rolls limited. Heinz naturally is as proud of this as the citizens are of Heinz!



Thus, many of the pennies you spend for Heinz foods find their way back to people

in busy little cities and help build a better standard of living for the families of men who work for you there.

We are always grateful to that Good Green Earth which transforms tiny seeds into rich harvests with the magic wave of a season—and grateful to the men who woo the earth to gain for us the prize products that make our fine foods possible. We have always been close to the miracle of growth and thus learned long ago that a good seed properly planted and carefully tended will bring a good harvest. Perhaps that simple knowledge applied to our own business has helped us to be guests at **57** your family table for 70 years.

H. J. HEINZ COMPANY, PITTSBURGH, PA.

## AMERICA'S FUTURE

Pacific Northwest: the story of  
a vision and a promised land

In the Ephrata Cafe in Ephrata, Wash. (pop. 516), three obscure small-town Americans—a lawyer, a newspaper editor and an abstractor—were sitting over their lunch one July day in 1918. Most citizens were talking about the Second Battle of the Marne that day but these three, looking ahead to peace, were thinking about the future of the great raw, thinly settled Northwest country to which two of them had migrated from Nebraska, one from Wisconsin. Inevitably, thoughts turned to the mighty Columbia, second largest river in America, pouring unchecked down to the Pacific, wasting untold quantities of potential hydroelectric power and of water to irrigate the country's rich but arid land. Musing on those lost riches, the lawyer, William M. ("Billy") Clapp, had an idea.

Fifty miles north of Ephrata in central Washington, eons ago, the Columbia had been dammed by ice. Swelling to a great lake behind this obstruction, the river had flooded over its high canyon walls, flowed off at right angles to its old course. By the time the ice melted and the river returned to its original channel, it had carved out a new channel



PROPHETS OF GRAND COULEE DAM: BILLY CLAPP (LEFT) AND RUFUS WOODS, IN EPHRATA, WASH.

some 50 mi. long, 2 to 5 mi. wide, 500 to 1,000 ft. deep. This gorge, left dry and barren high above the river, was named the Grand Coulee. In the dry country around and to the south of it lay 1,200,000 acres of the nation's richest land, needing only water to be transformed into a national garden. For 15 years, since the Bureau of Reclamation had reported on the land's potentialities, men had been racking their brains for a way to get water to it.

Billy Clapp turned to his companions. "Why not," he said, "dam the Columbia and pump the water back into the Coulee?" If he had proposed a bridge across the Pacific or a ladder to the moon, it could hardly have seemed more fantastic. To replace the ancient ice with concrete and steel called for a greater building feat than any that man had attempted in all history. But Billy Clapp's friends were men of vision, too. Gale Mathews, the abstractor, bobbed his head. The editor, Rufus Woods of the Wenatchee, Wash., *Daily World*, banged a fist on the table. "Billy has it!"

Gale Mathews was bedded with laryngitis when a LIFE photographer last fortnight took the picture

of the two happy men above. Past now are the years when they were ridiculed as idle dreamers while Woods campaigned for the dam in his paper and all three pushed their crusade with speeches up and down the State, pleas to legislators, letters to Washington, mimeographed press releases by the thousand. Franklin Roosevelt caught their vision of the Northwest's promise when he visited it as a vice-presidential candidate in 1920. Thirteen years later, when he became President in 1933, their great dream of water and power at last began to take shape. Today 7,000 men, midway in the 8-year job, are rearing monstrous Grand Coulee Dam (see p. 22).

Vast as it is, the area to be irrigated by Coulee is a relatively small chunk of the Northwest country comprised in the four big States of Washington, Oregon, Idaho and Montana. Rufus Woods, Billy Clapp and Gale Mathews are only three of many enthusiastic, confident Northwesterners who see their region as America's "last frontier" and "promised land." LIFE, beginning this special issue on the future of America, salutes the seers, the vision and the land.

# PACIFIC NORTHWEST

(continued)



American Frontier, 1939: an Idaho farm on the Salmon River at the base of the Payshemere Mountains



# PACIFIC NORTHWEST

(continued)

## THE LAND IS RICH IN NATURE'S GOODS

Lumber, metals, wheat and fruit

The look of the land bears out the Northwest's frontier promise. Behind the cities of the coast lie mighty reaches of forest, mountain, valley and river where you may go for miles and see only a thread of railroad track or a lonely settler's clearing as evidence of man's presence on the giant earth. The four Northwest States contain 18% of America's land, less than 3% of its population—and 41% of its potential hydroelectric power.

Unlike great open spaces to the South and West, the Northwest land is rich. Out of it pours a flood of useful wealth: more than a third of the nation's lumber, a seventh of its wheat, a tenth of its flour, a third of its apples, a sixth of its wool, an eighth of its salmon and potatoes. Rich in minerals, the

Northwest since 1848 has produced some six billion dollars worth of gold, silver, copper, lead and zinc. In the Northwest stands over one-half of all the virgin timber left in America—enough to supply the nation's needs forever if it is properly conserved and replenished. President Jefferson did well indeed when he sent Meriwether Lewis and William Clark in 1804 (see p. 48) to explore the Northwest wilderness and claim it for the United States.

The Northwest's chief industrial handicap has been its distance from the manufacturing centers and markets of the Midwest and East. Hence little manufacturing, except of forest products, has developed. But America itself was once thus distant from the markets of Europe and overcame the handicap

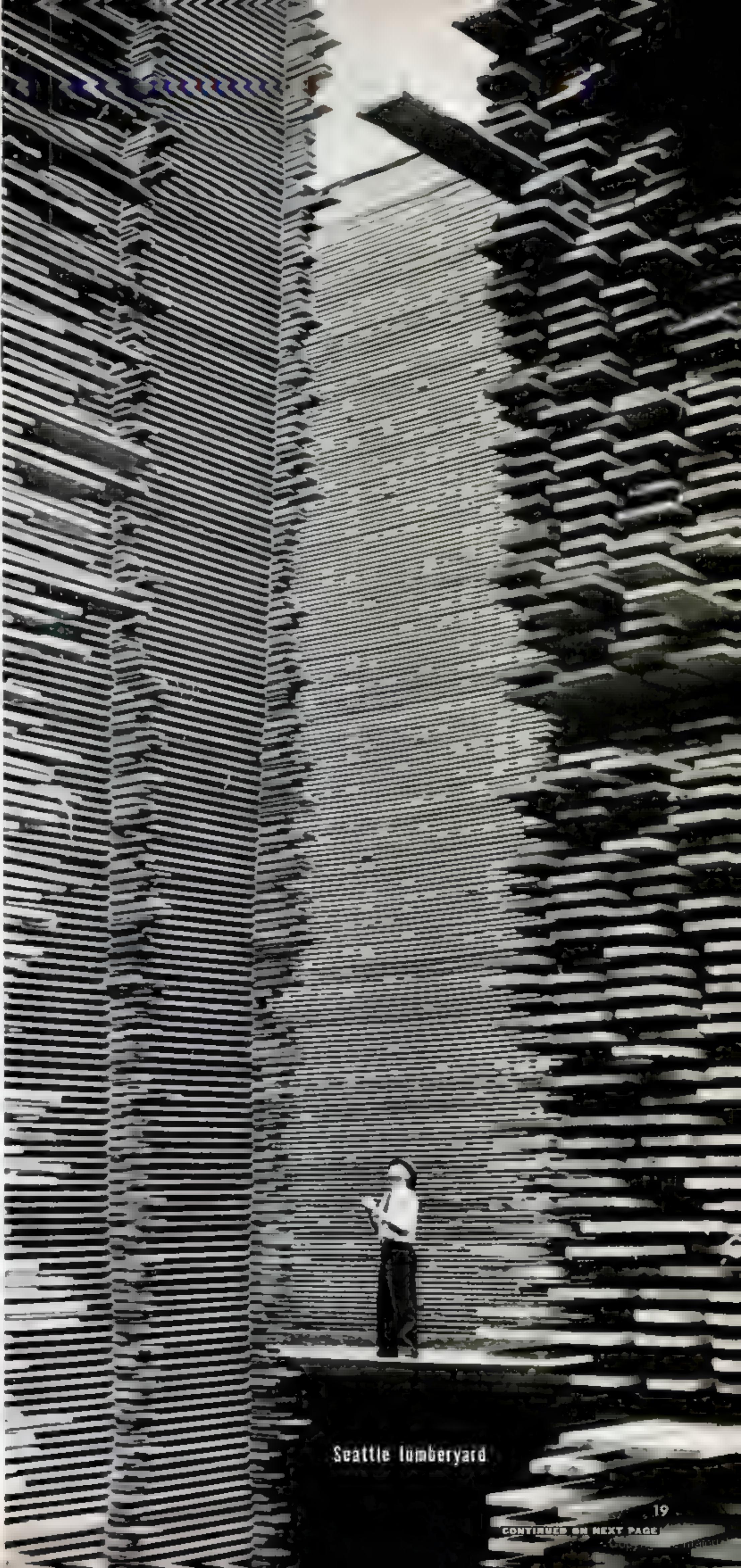


THE GREAT REDUCTION PLANT OF ANACONDA, WORLD'S LARGEST COPPER MINING COMPANY, 20 MILES FROM BUTTE, MONT. OUT OF BUTTE DISTRICT MINE

by creating its greatest market at home. This is what the Northwest hopes to do. If the people from the parched and eroded lands of the Great Plains continue to crowd into this "promised land" manufacturing industries seem sure to follow—especially with the lure of cheap and abundant electric power. Not much heavy manufacturing is expected to develop soon, because of transportation costs and lack of coal and iron. But the Northwest can manufacture for itself and for California, in new abundance, many of the light goods which it now largely imports. In this lies the hope, shared by President Roosevelt, that the Northwest may also prove a promised land for idle workers from the overcrowded factory towns and slums of the East and Middle West.



WE HAVE COME OVER EIGHT BILLION POUNDS OF COPPER



Seattle lumberyard

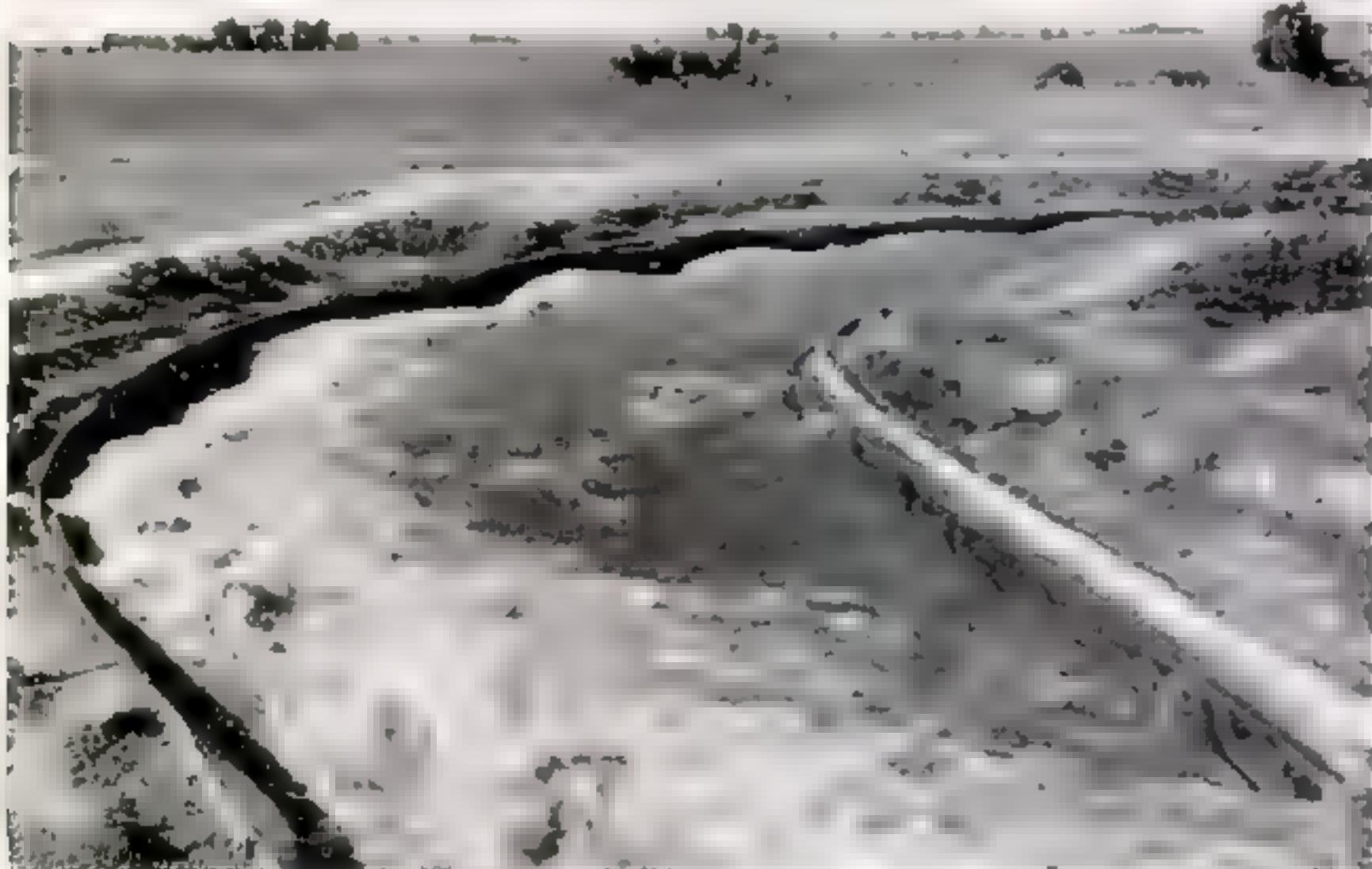
## PACIFIC NORTHWEST

(continued)



This wasteland, covered with sagebrush, lies in the Columbia Basin, which the Grand Coulee project will irrigate at the rate of 100,000 to 150,000 acres.

a year beginning in 1943. To prevent profiteering, Government appraisers are already at work fixing the prices at which owners may sell their land.



Water flows down canal from Deer Flat Reservoir to flow out on the Boise Valley land shown at right. Land sold for \$1 to \$5 an acre before this project was

started in 1906, now sells for \$100 an acre. Population has increased up to 100% in irrigated counties, while decreasing in neighboring, non-irrigated ones.



"Now I don't have to look up at the sky every morning to see whether my family will eat," say Dust Bowl migrants to irrigated land. Because vegetables

and fruits are the main irrigation crops, Northwest irrigation will not greatly affect nation's farm surplus problem, chiefly caused by wheat, corn, cotton



# IRRIGATION MAKES THE NORTHWEST LAND BLOOM



The western valley of the Northwest, lying between the low Coast Range and the towering Cascade Mountains which slice down through Washington and Oregon, in general gets abundant rain. But the Cascades catch and condense the flying Pacific rain clouds. In the reaches to the east the land is dry. Unwatered, most of it is good for little but grazing and precarious wheat farming. But the Northwest makes the land bloom by damming or diverting the rivers which rush down from its mountains, draining them onto the land through irrigation canals.

The photograph above, taken over Idaho's Boise Valley, shows spectacularly how irrigation makes the earth fruitful. Most irrigation is by gravity flow. Land even one foot higher than the canal cannot be

watered without pumping. In this photograph, the land to the right of winding canal is irrigated. The land at left, being higher, remains a scrubby waste.

Five million acres in the Northwest, a land of dams and ditches have been irrigated. Five million more are suitable for irrigation. The giant Grand Coulee project alone will water more than one-fifth of these. Still another 5,000,000 fertile acres remain to be reclaimed by clearing cut-over timber land, draining swamps, etc.

Into this pioneer country, whose hardy settlers were still fighting Indians when Mrs. William Astor was giving regal lawn parties at Newport, have migrated 400,000 people since 1930. They include 20,000 drought-driven families from the Great Plains,

like those described in John Steinbeck's stirring new novel, *The Grapes of Wrath* (see pp. 66-67). Most of these have settled on poor, cheap land. In the short-range view, the nation's farm problem is over-production and low crop prices. But if America over the years is to flourish as it might, it must make the best possible use of its soil and human resources. Some 800,000 American families are now miserably farming, at little profit to themselves and the nation, 86,000,000 acres of submarginal land which should no longer be cultivated. The Federal Government has helped some by lending money to buy new land, must help many more if there is to be any great shift of American farmers from overcrowded and worn-out lands to the productive acres of the Northwest.

# PACIFIC NORTHWEST GRAND COULEE DAM: POWER AND PROMISE

(continued)

This is Grand Coulee Dam, the dream of Billy Clapp, Rufus Woods and Gale Mathews, as it stood—flanked by the towns for its 7,000 builders on either side of the Columbia—at the end of May 1930. It is three-fifths finished. When completed, in a year and a half, it will be as high as the Washington Monument. It will be wide and thick enough to imbed four U. S. Capitols. It will contain two and a half times as much concrete as Boulder Dam (see p. 46), biggest thing built by man to date.

Piling up a 151-mi. lake behind it, it will lift the

level of the river 355 ft. The world's biggest pumps will force 500 tons of water per second up another 280 ft. through the diversion tunnels shown just left of dam on far side, into the Coulee shown stretching off at right, thence to be sluiced down on 1,200,000 thirsty acres to the south.

Irrigation will begin in 1943. The generators which will make Grand Coulee the world's greatest single source of electric power are to be installed in units over the next 20 years. The dam and power plant will cost some \$200,000,000, the irrigation project



another \$200,000,000. Smaller Bonneville Dam, another New Deal project 290 mi. down the Columbia in Oregon, is already finished. It has two of its prospective ten generators in place. Between them Grand Coulee and Bonneville will open up nearly the whole Columbia River to navigation, supply enough power to electrify an agricultural-industrial empire.

Will the empire rise? This is the challenge to America—to all Americans.

The old American frontier, where a strong man with ax and plow could take up free land and make

his way regardless of his neighbors, is gone. In the industrial civilization of today and tomorrow, no region, no city, no business, no individual in America will ever again be able to prosper alone and independent of the rest. The new frontier is one on which, working together for the common good, Americans will use their great technical and creative resources to produce the full abundance of which the American land is capable, an abundance which will make the long American Dream of dignity and freedom and equal opportunity for every citizen at last come true.



### Pioneers on Yacolt Mountain



Jack Yandle and family migrated westward from Kansas City in 1925, settled in Portland. He lost his job when Depression came, and built this cabin on Yacolt Mountain in Clark County, Wash.

We are living on Yacolt Mountain  
In the State of Washington  
See the snow on old Mt. Helens  
Sparkling in the morning sun.

We are starting life all over  
In our little old log shackles  
Starting from the very bottom  
Built a load upon our backs.

We are trying to beat depression.  
Some say it can't be done  
But we find the grace, owing  
Some we'll have given us for others.

What we want is lots of neighbors  
Three miles from Hedges' home but none  
They're the ones to fit the place—neighbors  
You know the ones I speak in earnest  
Find the good old fashioned neighbors  
You help me and I'll help you  
It's hard to live here  
For I know they are bad, too.

But when we lose these neighbors  
What a messin' this world be  
If we can't find a bunch of  
Ladys' that visit us and talk  
I mean that's what I mean.

Mother of six, Mrs. Minnie Howard Yandle writes Yacolt Mountain notes for the *Clark County Sun*. She also puts her hopes and yearnings into verse. The poem above is in her own handwriting.



Mrs. Yandle has an electric washing machine, vacuum cleaner, iron, radio, three lamps—and no electricity. Power from Bonneville Dam, 30 mi. away, will bring her neighbors, lighten her life.

# LIFE ON THE NEWSFRONTS OF THE WORLD

A special issue of LIFE shows some of the things which are right about America

For ten years America's headline-making news has been mostly bad. It has told of heartaches and headaches, of depression and deficits, fierce political and industrial quarrels, alarms of war. For ten years we have wallowed in our woes and magnified the things—many of them transitory—which are wrong with the nation.

The purpose of this special issue of LIFE is to take stock of some of the abiding things which are magnificently *right* about America. It aims to suggest, by examination of our heroic past and hopeful present, the richer and happier America which will be ours when we have nerveed ourselves to accept our bounty and our destiny.

**Debt and Disaster.** For the Republicans of the nation, last week was "National Debt Week." They celebrated it by pointing with alarm to the Federal Government's 40-billion-dollar-going-up debt and prophesying, with many a fearsome statistic, that national bankruptcy or "the equally suicidal jeopardy of inflation" lies ahead. But, as the New York *Times* index of business activity touched a low for the year, it was rumored that President Roosevelt was planning a new spending-lending drive to prime the pump. Appearing before the American Retail Federation on May 22, the President defended the debt ("after all an internal debt owed not only by the nation but to the nation"), defied his critics, proclaimed

his intention to stick to his New Deal guns. He was reported to have yielded, however, on the issue of revising taxes to help Business. His critics came right back at him three days later at the New York convention of the American Iron & Steel Institute, whose retiring president, Tom Gurdler, Chairman of Republic Steel Corp., asserted that

the New Deal was leading the nation "straight down the road to dictatorship" and "certain disaster."

Meantime last week in the Pacific Northwest men were at work as usual reaping and digging and cutting good things from the rich earth, planning and building to make it yield still more in a brighter future (see pp. 15-23).



ROOSEVELT

**Lick Crash.** A spectacular collision between man's oldest science and one of his newest inventions made headlines when on May 21 an Army airplane, lost in fog, crashed into the Lick Observatory administration building on California's Mount Hamilton, killing all three of its passengers and wrecking the building.

Meantime, undismayed by accidents, America's research scientists were pushing forward on a thousand fronts, working to give man better materials for his tools of living (see pp. 26-28), better food for his body (see pp. 61-63).

**Fall of a Boss.** The long-whispered corruption at the heart of the government of a great American city was at last publicly confirmed on May 22. Tom Pendergast, longtime boss of Kansas City, marched into Federal court and pled guilty to a charge of having evaded income taxes on nearly \$600,000 of unreported income in 1935 and 1936—\$315,000 of it

## BOOKS ABOUT AMERICA

Here are a few of the recent books about America—and some older favorites—which LIFE's Editors have found informative and stimulating.

### LAND AND RESOURCES

*The New Western Front*, Stuart Chase  
*Our Promised Land* (Northwest), Richard L. Neuberger  
*Deserts on the March*, Paul B. Sears  
*Men and Resources*, J. Russell Smith

### TECHNOLOGY

*Nine Chains to the Moon*, R. Buckminster Fuller  
*Tools of Tomorrow*, Jonathan Norton Leonard

### MISCELLANEOUS

*The Good Society*, Walter Lippmann  
*Roads to a New America*, David Cushman Coyle  
*An Artist in America*, Thomas Hart Benton  
*Photography and the American Scene*, Robert Taft  
*Progressive Education at the Crossroads*, Boyd H. Bode  
*We or They*, Hamilton Fish Armstrong  
*Our Enemy, the State*, Albert Jay Nock  
*Fire Cities*, George R. Leighton  
*Federal Writers' Project American Guide Series*

### HISTORY

*Oxford History of the United States*, Samuel Eliot Morrison  
*Our Times*, Mark Sullivan  
*America in Midpassage*, Charles and Mary Beard  
*Twenty Years of the Republic*, Harry Thurston Peck  
"We, the People," Leo Huberman  
*Road to War*, Walter Millis

## PICTURE OF THE WEEK

The biggest spot news of last week was, as the biggest news too often is, a disaster. Sunk off Portsmouth, N. H., 240 ft. below the surface, lay the Navy's new submarine *Squalus*. Down with it went 50 men. Up from it came 39 men, miraculously rescued. The other 28 were drowned. Yet, sad as this event was, it gave America reason to be proud. To pride in human heroism was added pride in the 9-ton steel diving bell, developed with care and foresight by the U. S. Navy, which accomplished the rescue at a record depth. Without this product of American resource and ingenuity, the men saved from the *Squalus* might still be lying in its sunken black hull.

On May 29, early in the morning, the *Squalus* set out to sea to test fast dives. She dived once and did not come up. What apparently happened was that, through some mischance, the induction valve which sucked in surface air for ventilation and engine use did not close. Water poured into the aft compartments. Brave work shut the forward sections off and kept water from flooding the whole hull.

Noing down, the *Squalus* settled in sticky blue mud. She sent up a smoke bomb. A sister submarine sighted it. Immediately the whole efforts of the Navy and the eyes of the country were focused on this spot. The weather was ominous but by noon next day the sky cleared. Through the night the men below lay cold and fearful with the faint smell of deadly chlorine tickling their throats. By morning, the *Falcon* carrying the rescue bell on its aft deck, anchored above the *Squalus* (see opposite page). Divers dropped overboard. The rescue bell followed. In the murk below, it was fastened to the submarine's escape hatch and the men climbed up into it.

It took four trips and 18 hours before the bell brought up the last survivor. President Roosevelt spoke for the nation when he exclaimed: "A great job!" Even the German press called the rescue "one of the most inspiring actions of the American Navy." With the praise of America in its ears, the Navy settled down to the delicate job of raising the *Squalus* and the 28 who still remained in its flooded hull.



RESCUE BELL BRINGS UP FIRST SURVIVOR



A smoke bomb, released from the "Squalus"

40 fathoms below, shows the "Falcon"

where the sunken submarine lies

# THE WAR OF THE METALS

## Aluminum-steel battle presages an age of alloys



Steel fights back at aluminum by rolling a light, strong, stainless-steel skin for airplane wings. This metal sheet is only .005 in. thick. Unlike aluminum, which is riveted to airplanes, steel can easily be welded for speedier production and better streamlining.

Eighty years ago aluminum was so rare and precious that the Emperor of France dined with aluminum forks and spoons, relegating his guests to humbler utensils of gold. In 1886, the Hall electrolytic process of producing aluminum, one of the world's most abundant minerals, was invented. Today aluminum is a common metal which costs 20¢ a lb. Steel costs 2½¢ and copper 11¢ per lb. Light, strong and versatile, aluminum is by all odds the theme metal of the 20th Century.

Since 1910, steel and aluminum have been fighting for position on a wide industrial front. Aluminum first invaded enemy territory by shoving cast iron to the back of the kitchen stove. It built railway cars and trucks. It found its way into bridges and ships. It pre-empted the aircraft industry for itself. The big planes of today could not exist without aluminum wings, fuselages, engines and propellers. The production of aluminum soared from 8,000 tons in 1900 to 825,000 tons today.

But this technological war was most beneficial for the country at large. The struggle for markets and the improvements which competition forced upon all metal makers has made man increasingly the master of the materials he must use. Until 1915, the important experiments in steel alloys were largely done by army and navy ballistic experts. Since the World War, the whole field of industrial metallurgy has gone forward by leaps and bounds. Aluminum's great advantage over steel was its lightness and resistance to corrosion. Forced to meet aluminum's 9-to-1 weight advantage, steel was soon producing its own light alloys which opened up profitable new markets in the small-consumer field. The introduction of new alloys multiplied the kinds of materials available for man's use. The world, having lived so long in an iron age, is now entering an age of alloys.

In their future wars the whole trend of metals will be toward even greater lightness and strength. Aluminum must begin to worry about the encroachment of magnesium. Steel and aluminum must watch the developing use of beryllium which is capable of making fine alloys out of such heavy metals as copper. And all metals will turn a common front against a new kind of material—plastics. Today plastics are only nibbling at the metals market with such special things as automobile gadgets, ashtrays, bathroom fixtures and chemical vats. Tomorrow, reinforced with metal, they may be making much big things as airplanes, truck bodies and houses.



The most spectacular battle has raged in transportation. Until 1929, all metal railroad cars were steel. Then aluminum made possible lighter, more economical cars. It made quick inroads on steel's market as railroads demanded speedy, streamlined trains. To match



aluminum in weight, steel had to be rolled so thin that it fell behind aluminum in rigidity. So steel developed a process which, by corrugating steel, gave it rigidity to match aluminum's. Above, a streamlined Pullman car is fabricated of corrugated steel in Budd plant.

Stacked like symbols from aluminum  
are these plane propellers

being made in United Aircraft's plant.

CONTINUED ON NEXT PAGE

## WAR OF METALS

(continued)



**Steel and aluminum are allies** in a war on copper's near-monopoly of power lines. These are transmission cables. Outer wires are aluminum. Core wires are steel. Copper is

the metal most used in power lines. But it was found that aluminum, being lighter, could be stretched in single spans across greater distances. Lower steel supporting towers

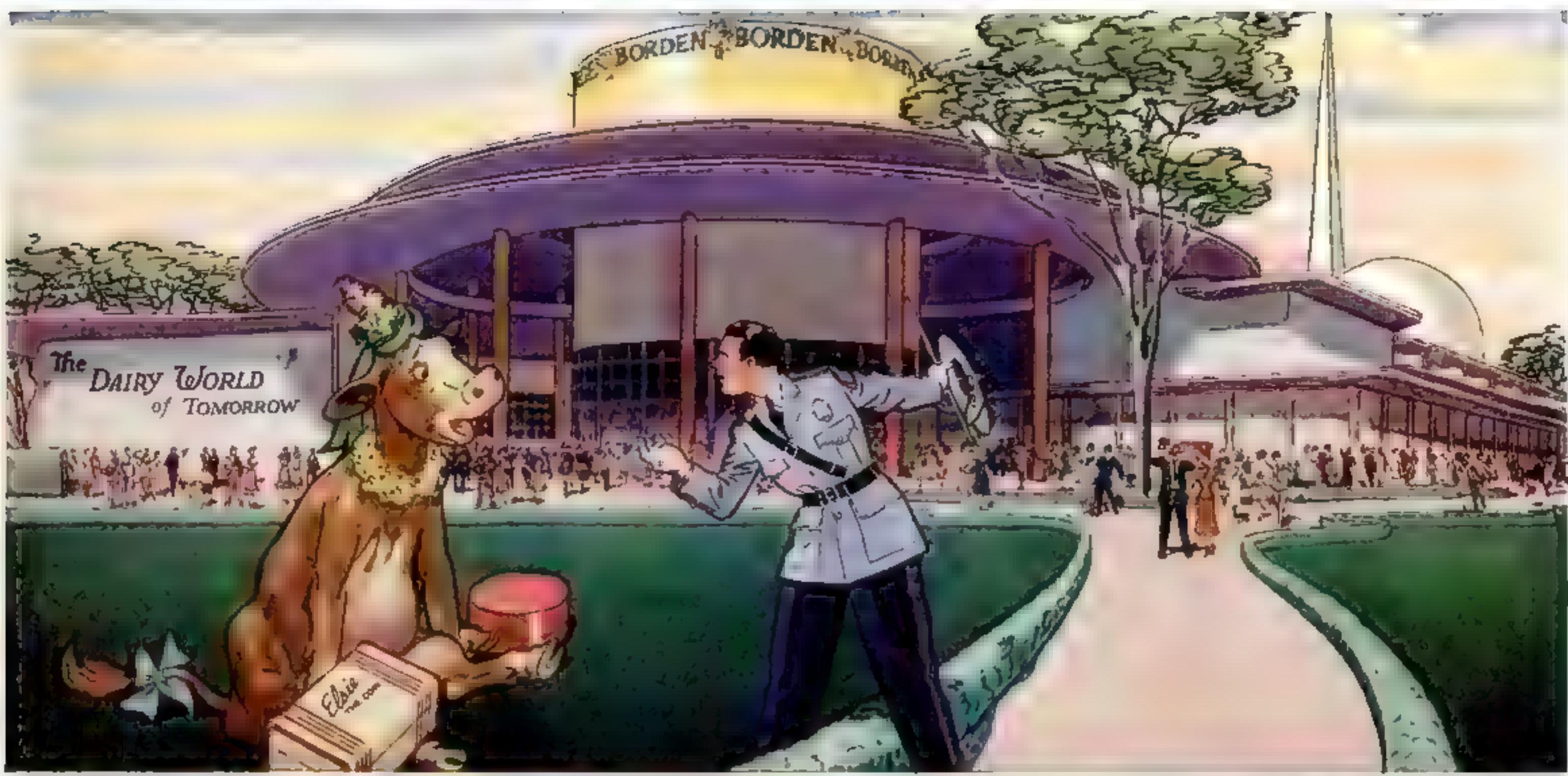
were needed. Then it was discovered that a strengthening core of steel enabled aluminum cable to span even greater distances. Steel, having lost in towers, gained in cables.



**The battle of the kitchen stove** finds three metals at war. On the range above, potatoes fry in an aluminum deep fryer. Veal cutlets are browned in a cast-iron skillet. Peas

cook in a stainless-steel pot. Sauce simmers in a copper pan. Aluminum's first great use was in the kitchen. It quickly pushed cast iron aside because it was lighter, easier

to clean. Steel is now taking iron's place with strong clean-surfaced stainless-steel ware. Aluminum outlives both better than steel. Expensive copper has long lost the battle



COPYRIGHT 1939 BY THE BORDEN COMPANY

## "—But you promised me a Meadow!!"

Elsie looked disappointed, dazzled, and curious, all at the same time—a rather difficult feat for a cow.

"It is a meadow, Elsie," insisted the World's Fair Man. "It's Flushing Meadow—the most wonderful meadow you'll ever see. All those bright buildings and wide avenues and gay flags have been put there for the New York World's Fair."

Elsie still hesitated. "Maybe it's just a bit too grand for me," she said. "Maybe I'll feel out of place."

"Nonsense," chuckled the Man. "You're going to have the time of your life here living in 'The Dairy World of Tomorrow'! Why, you'll be in a lovely, air-conditioned Borden barn—you'll still eat the finest food—and you'll be milked on a merry-go-round..."



"What fun!" mooed Elsie, brightening. "But why bring me way out here...?"

"So that millions of people can actually *see* how you live," the Man explained. "We want everyone to see the kind of care and skill and science that make milk so good it can be *Borden's Milk*."

"And Borden's Ice Cream," added Elsie.

"Ice cream—what do you mean?" puzzled the Man.



"Why, Borden's Ice Cream is made from my cream and milk," explained Elsie. "And because Borden sees to it that my cream and milk are always rich and good

as can be, Borden's Ice Cream naturally turns out to be rich and good, too."

"That also explains," she went on, "why *Borden's Eagle Brand Sweetened Condensed Milk* can be counted on to bring special goodness to magic cooking—the marvelous, new kind of kitchen-craft that makes tempting cookies, candies, and cakes in almost no time."



"Say," said the Man, "your milk does get around!"

"More than you think," agreed Elsie. "As *Borden's Evaporated Milk*, it contributes a particularly fresh, natural flavor to cream soups, mashed potatoes, and



many other good things to eat—because it's such very good milk in the first place."

"You've got quite a bit to do with the whole dinner

menu, then," the World's Fair Man said admiringly.

"Right down to the cheese," said Elsie. "My delicious milk also goes to make *Borden's Chateau* and all the other tempting members of *Borden's Family of Fine Cheese Foods*. It's even playing a very special role in Hollywood these days, besides."

"Hollywood!" exclaimed the Man.

"Yes, indeed," smiled Elsie. "My milk helps to make



*Borden's Chocolate Malted Milk* so good, refreshing, and satisfying that Hollywood stars pick it as the mainstay of light luncheons that are kind to trim figures."

"Elsie," said the World's Fair Man, "I'll bet you turn out to be a real star here yourself!"

"I hope so," said Elsie, "for I'd like to send our 'Dairy World of Tomorrow' audience home remembering this mighty important truth about every dairy product... if it's *Borden's* it's GOT to be good!"

*More than 200,000 dairy farms furnish milk for Borden... more than 27,500 Borden employees work in behalf of 47,000 owner-stockholders, to provide the best of dairy products, to guard the goodness of all Borden foods, and to bring them to your home.*

*-if it's Borden's it's got to be good*



ON Y.W.F.



# These four roses tell you the age of the *youngest* whiskey in it!

**Q. What is meant by the "youngest" whiskey in Four Roses?**

**A.** Just that. Four Roses is a combination of *four* straight whiskies. And even the *youngest* of these whiskies is over a year old when it comes out of the wood for blending. Most of these whiskies are old enough to be bottled alone.

**Q. Then why aren't they bottled separately each as a fine bonded whiskey?**

**A.** Because we think it's better to make these whiskies lighter, milder, stronger than 90 proof instead of the 100 proof which bonded straight whiskies must be. Then, with a skill born of 71 years experience, we bring these distinguished whiskies together, so as to realize all their individual

virtues in a whiskey that's finer by far than any of them could be alone.

**Q. Can this be proved?**

**A.** Yes! We're certain that once you taste the superb flavor of richness and mellow smoothness of Four Roses, you'll agree that it's the finest whiskey that simply can't be matched.

Ask for Four Roses at your favorite bar or package store today. You may find that it costs a little more. It's worth it! *Four Roses*—*Dinner Imported from the Bluegrass.*

**EVERY DROP IS WHISKEY  
AT LEAST 4 YEARS OLD**

A BLENDED OF STRAIGHT WHISKIES—90 PROOF. THE STRAIGHT WHISKIES IN FOUR ROSES ARE FOUR YEARS OR MORE OLD.



# AMERICAN YESTERDAYS

Nearly a century of national history  
has been recorded by the camera

Exactly 100 years ago Louis Daguerre announced in Paris his discovery of the photographic process. Within a month the first successful photograph in the U. S. had been made. Within ten years photographers had opened shop in practically every U. S. city, were with the U. S. armies in Mexico, were following the frontier to the West. From that time on, photography as art in America took second place to photography as a medium for the recording of history. In no time and in no country has so much history been made under the open sky by free men as during America's last century. America's brief memory of its vivid yesterdays is the more sharp because photographers were there to fix them on paper exactly as they happened. On the following pages LIFE presents a few pictures from America's historic album of family photographs.

These pictures are as good as those any photographer can make today. Essentially the only improvement in photography has been in speed. Daguerre's process permitted only one image and required exposures of more than three minutes. The wet-plate negative process which followed reduced exposures to less than one minute and permitted unlimited reproduction of the image. But it required the photographer to prepare, expose and develop his glass plates on the field within thirty minutes. Thus process recorded the Civil War and the opening of the West. Today with fast lenses and sensitive film permitting exposures of 1/1000 of a second, photography is limited only by the enterprise of the photographer.



Boston in 1860 "as the eagle and the wild goose see it" was the subject of this first aerial photograph made in the U. S. Taken from a captive balloon, it shows the business district and the masts of square-rigged ships at the city's wharves.

CONTINUED ON NEXT PAGE



The Mexican War was the first ever photographed. In the picture above General J. E. B. Stuart, second in command to Zachary Taylor, arrives at Saltillo, Mexico, on November 7, 1846-47, to begin the campaign that ended in the battle of Buena Vista. This picture, known as "The Valley of the Shadow," is a local daguerreotype at Saltillo, is also one of the best outdoor daguerreotypes ever made.



Column for the U. S. Capitol is hauled through the streets of Washington, D. C., in 1860. Capitol remodeling was continued by Lincoln as Union propaganda through the Civil War and finished in 1863. Price and Birch, slave dealers (below), did a thriving business in Alexandria, Va., until 1861, when their slave pen became a Union prison for Confederate captives.





**San Francisco Bay** in 1851 was filled with ships that had been sailed around the Horn and abandoned by both passengers and crew in the rush inland to the gold fields. In

the three years after gold was discovered at Sutter's Mill,

more than 100,000 prospectors—from Australian prison camps, from China, Hawaii and Eastern U. S. poured



**Pioneer Photographer's mule** packed a 45 lb. view camera, portable darkroom and glass negative plates. This was the equipment used by Frontier Photographer William H. Jackson. His negatives, a priceless record of the opening of the West, have been preserved intact.



**On the Oregon Trail** in 1888 this pioneer family was photographed on its way across the Nebraska prairies. Families like this were the economic units that opened up the West. Packing only the barest necessities, including two rifles, they were intelligent travelers.



**Custer's regiment**, in marching formation, set out from Bismarck, N. D., in 1874 to explore the Sioux Indian Territory. Two years after this photograph, now owned by Professor Robert Tufts, was made, Custer led his troops into the disastrous ambush at Little Big Horn.



**Klondike Gold Rush** in 1898 led the city-bred prospectors over Alaska's Chilkoot Pass from Dyea into 600 miles of bitter wilderness before they reached the gold fields in Canada's Yukon. The Gold Rush brought Alaska a population and opened up another frontier.



through the city to meet the 100,000 more who had crossed the plains. Sutter, whose iron-works appears at left in pan-

orama, and other big California landlords, were stripped of their holdings by miners' claims. The real fortunes, how-

ever, were made not in the gold fields but in the coast cities by shrewd Yankee traders, like Huntington and Stanford.



A scalped hunter, victim of Indians, is found near Fort Dodge, Kan., in 1869. The ruthless violence of the Indians against advancing frontiersmen kept the U. S. Army in the West 80 years, from the Fort Ridgely massacre in 1862 to the Battle of Wounded Knee in 1891.



Central Pacific Railroad construction in 1868 east from Sacramento burrowed through 80-ft. snow drifts in Sierras. Here twelve locomotives in tandem (only seven shown), haul a construction train to point of operations. Construction materials were shipped around Horn.



Oklahoma land rush brought 20,000 settlers to the territory line at 12 noon, April 22, 1889. Homestead Act lands had already been taken up. At gun the settlers broke in a wild race to stake out 160-acre claims on the 1,887,000 acres of prairie bought from the Indians.

## Wyoming horse thief is executed

Horse-thieving in Wyoming in 1890 was no longer a capital offense. But Horse Thief Patrick Coughlin was quick on the trigger. From his log-cabin hideaway in the hills back of Evanston, he shot two police officers. Present at his execution was a photographer who stood to make a small profit selling prints. Below is his complete documentation of a frontier execution—one of the first one-two-three photographic narratives.



PATRICK COUGHLIN SITS IN CHAIR, A TARGET PINNED OVER HEART



FROM TENT, EXECUTIONERS FIRE THE RIFLES. FOUR ARE LOADED



A PRIEST ADMINISTERS LAST RITES AS HORSE THIEF EXPIRES

# AMERICAN YESTERDAYS

(continued)



**Brooklyn Bridge**, photographed under construction in 1877 when only a catwalk spanned river to Manhattan, is one of the pioneer achievements of U.S. engineering. Its four huge

cables, which were wrapped in mid-air over the river from 5,000 strands of steel wire to carry the 9,500-ft. roadway, were radical invention of the Roeblings, bridge's designers.

Steel-link eyebars (foreground) anchored cable in 80,000-ton pier. John A. Roebling was killed at work. His son, Washington, crippled by bends, finished bridge from sickbed.



**Statue of Liberty's torch** was exhibited in 1876 at the Philadelphia Centennial Exposition, then (above) in Madison Square, New York City, to raise funds for pedestal. It went back to France, returning with the completed statue a decade later.



**A Pullman Palace Car** on the Pennsylvania Limited in the 1880's had a sky-blue ceiling, plush seats, Pintsch gas lights and conductor's signal over aisle. Passengers testified that they were as comfortable "as though sitting in their own parlors."

CENTINUAL IN REAR PAGE

# VALUES LIKE THESE MAKE WESTFIELD TODAY'S GREATEST BUY IN FINE WATCHES!



Each Westfield is  
time-tested...and approved!

Compare a Westfield with watches  
at twice the price! Compare for  
style...dependability...and then  
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Ask your jeweler what he thinks of  
Westfield. Ask executives, engineers,  
pilots—men to whom seconds  
count! Over two million wear  
Westfields...today's outstanding  
watch value.



Nothing is smarter or more flattering than  
the tiny round watch. Here's a beauty—and a bargain.



A fine, dependable timepiece, handsomely  
styled, smartly streamlined, at an amazing  
price.

## AND HERE ARE TWO MORE GREAT VALUES!



LADY  
WESTFIELD \$24.50

Sparkling with diamonds and richly engraved. A thrilling timepiece for a lovely wrist.

WESTFIELD \$17.75  
TRENTON

Modern, smart, and truly masculine. Matchless in performance and in value.



WESTFIELD WATCH COMPANY

FIFTH AVENUE, NEW YORK



## Why dads and grads want Remington Rand's "30% closer" shaving head!

FATHER'S DAY... June graduations... both perfect occasions for giving electric shavers. The photograph of the exclusive Diamond Brand head shown above tells why a Remington or a Rand Close-Shaver is the one to give or to ask for.

The part of the shaving head that touches your face is made of diamond-hard steel so thin that it is even thinner than the paper this ad is printed on. It's twice as thin as the thinnest razor blade—so thin that it lets the "business edges" of the shaving head get 30% closer to

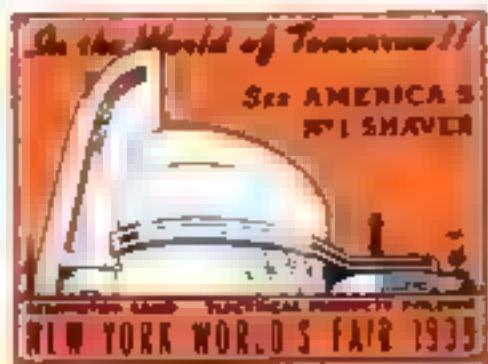
the skin than on any other electric shaver.

**FREE TRIAL.** But don't take our word for it. Go to your nearest dealer. Tell him you want to be shown before you buy. Ask him to let you try a Remington or a Rand right in his store and let you take it home to use for a week or 10 days. That way, without risking a cent, you can prove to yourself why more Remingtons and Rands were sold last year than any other shaver in their field. General Shaver Division of Remington Rand Inc., Bridgeport, Conn. Remington Rand Ltd., Toronto, Canada.

**The Remington Close-Shaver \$15.75**

**The Rand Close-Shaver \$9.50**

(Prices slightly higher in Canada)



**Remington Rand**  
The Electric Shaver Company

## AMERICAN YESTERDAYS (continued)



In Civil War arsenal at Washington, D. C., cannon balls provided Matthew Brady with a subject whose pattern suggests some of today's work by LIFE's Margaret Bourke-White. He spent fortune to make first camera documentation of modern war.



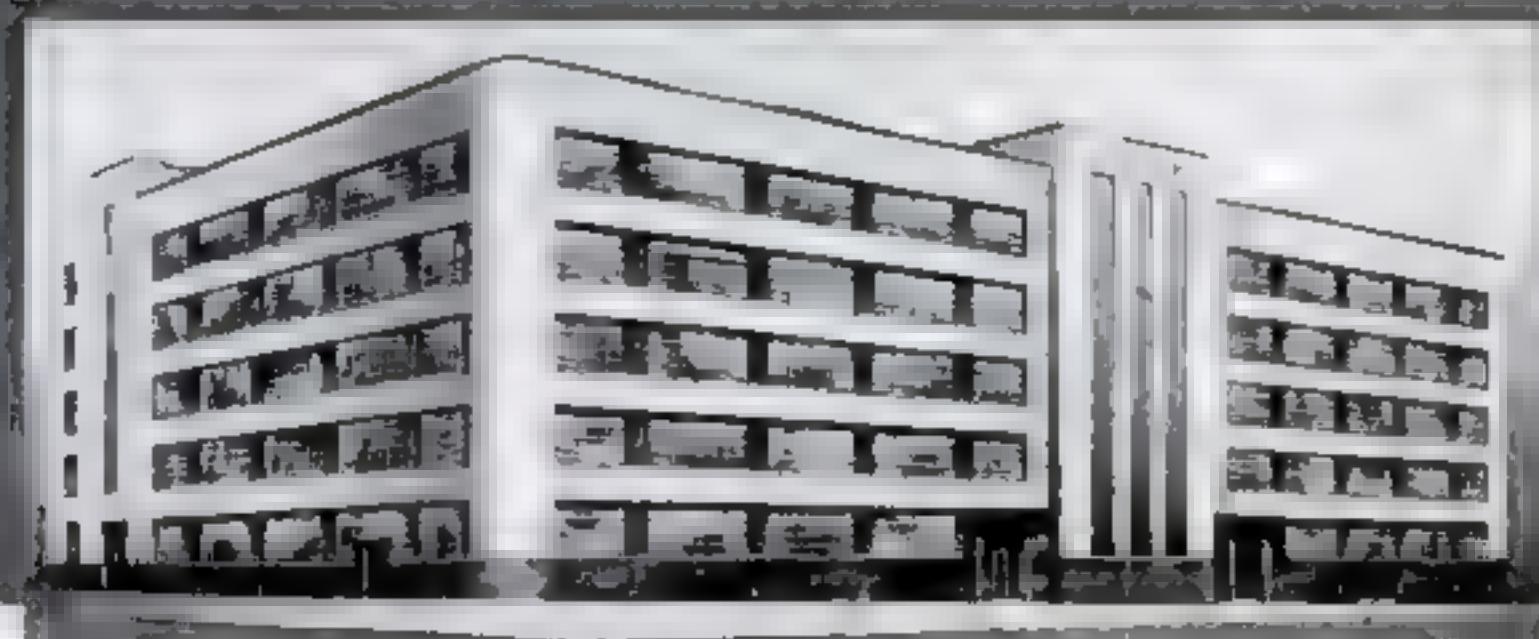
Remains of unburied dead, killed in battle at Cold Harbor, June 1864, are gathered for burial by freed Negroes at the War's end. Casualties amounting to more than one-fourth of troops engaged made the Civil War the bloodiest in modern history.



Observation balloon was used by the Union Army in the Civil War. Here the *Intrepid*, at Fair Oaks, May 1862, is filled with hydrogen converted from water by generators at left. Designer Lowe's aerial observations here helped avert a Union defeat.

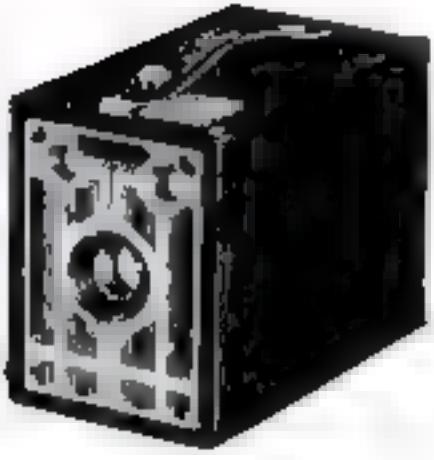
# PICTURE MAKING SPURTS AHEAD

**WITH NEW LOW  
KODAK PRICES**



NEW EASTMAN PLANT, extensive addition to camera factory already the largest in the world, as it will appear when completed. Here will be produced the finest precision cameras, made by the largest group of American craftsmen ever assembled in the photographic industry.

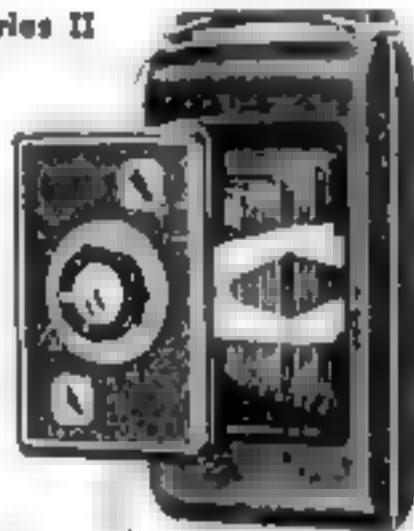
## SIX-20 BROWNIE JUNIOR



\$2.50 Now \$2

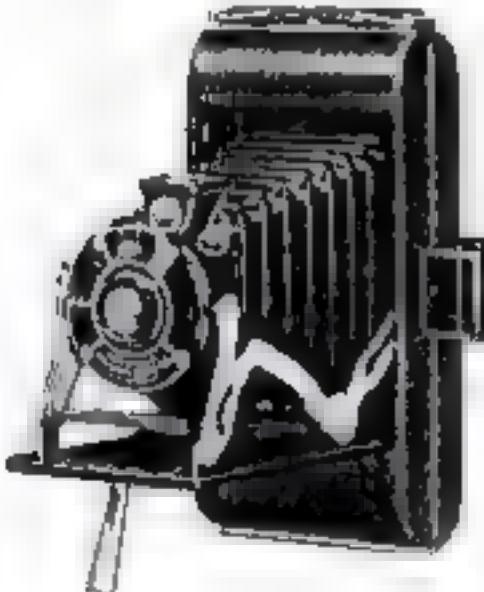
## JIFFY KODAK SIX-20, Series II

Combines box-camera simplicity with folding-camera style and convenience. Touch one button—"Pop"—Jiffy Kodak opens. Touch another—"Click"—it gets the picture. A really good picture, and a big one— $2\frac{1}{4} \times 3\frac{1}{4}$  inches. Twindar lens, two crowned brilliant finders, easy two-way focusing, refinements that are up to the minute.



\$3.50 Now \$2.50

## KODAK JUNIOR SIX-20, Series II (Single lens)



One of America's favorite folding cameras. Quick in action—opens at the touch of a button, closes at the touch of a one-finger release. Has both reflecting and direct-view finders—you "shoot" from either waist height or eye level. No focusing required. Smart black pin-grain covering. Pictures,  $2\frac{1}{4} \times 3\frac{1}{4}$  inches.

\$3.50 Now \$2.50

YOU'LL see more cameras than ever now. Everybody's taking pictures, everybody wants a new, better camera—and it seems that "Kodak prices down" was just the news to start a buying landslide.

Eastman's new camera plant will cut manufacturing costs. In a sweeping reduction, Kodak prices are now brought in line with these lower production costs to come. They come to you in time to prepare for the greatest picture-making year to date... this year of World's Fairs and unusual vacation opportunities.

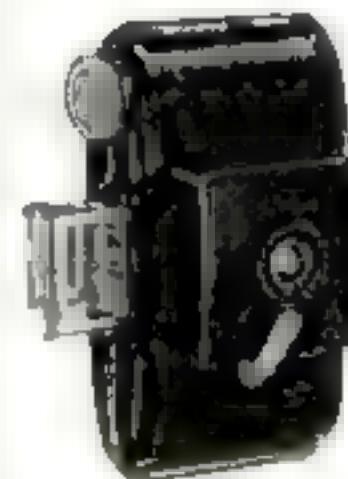
Newest, most popular cameras are included... these models constitute the Kodak line for 1939. You'll now get a brilliant, versatile, up-to-the-minute camera of Eastman quality at a price much lower than you thought. See your Kodak dealer today... Eastman Kodak Co., Rochester, N.Y.

*Any camera is a better camera loaded with Kodak Film. Accept nothing but the film in the familiar yellow box—Kodak Film—which only Eastman makes.*

**GOING TO THE NEW YORK WORLD'S FAIR?** Be sure to take your Kodak. Stop at the Kodak Building, where Eastman experts will advise you what to take and how to take it. And there you'll see the unique and gorgeous Cavalcade of Color—the GREATEST PHOTOGRAPHIC SHOW ON EARTH. Nothing like it has ever been seen before. Don't miss it.

**Only EASTMAN  
makes the KODAK**

**Your new camera costs less because  
Eastman is building an addition to the world's  
largest camera manufacturing plant**

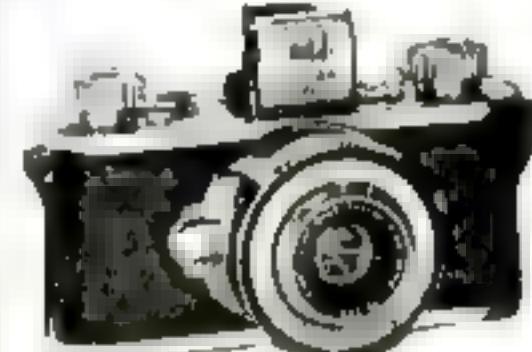


## KODAK BANTAM (f.8)

One of the most convenient cameras ever designed. Gives you pictures bigger than itself. Kodak Bantam (f.8) is about the size of a pack of cigarettes, yet pictures are  $2\frac{1}{4} \times 4$  inches—new finishing methods make it possible. Has Kodalinear f.8 lens, automatic film-centering device, folding eye-level finder, snapshot action. Louda with low-price 8-exposure Kodak Films.

\$4.50 Now \$3.95

## KODAK 35 (f.3.5)



\$3.50 Now \$3.350



## CINÉ-KODAK EIGHT, MODEL 20

The economy movie maker—brings home movies within the reach of almost everyone. Modest in cost, but a thoroughly capable movie camera. Gives you 20 to 30 black-and-white movie scenes—each as long as the average newsreel scene—on a roll of film costing \$2.25, finished, ready to show. Also makes movies in gorgeous full color on Kodachrome Film.

\$3.50 Now \$2.950

### BROWNIES

	WAS	NOW
Six-20 Brownie .....	\$3.10	\$2.85
Six-16 Brownie .....	3.75	3.25
Six-20 Brownie Special .....	4.00	3.75
Six-16 Brownie Special .....	4.50	4.25

### KODAKS

Jiffy Kodak Six-16, Series II .....	\$9.50	\$8.25
Kodak Junior Six-20, Series III, K.A. f.8.8 lens .....	13.50	12.50
Kodak Junior Six-20, Series III, K.A. f.6.3 lens .....	16.00	14.50
Kodak Junior Six-20, Series III, K.A. f.4.5 lens .....	25.00	22.00
Kodak Junior Six-16, Series III, K.A. f.8.8 lens .....	15.50	14.00
Kodak Junior Six-16, Series III, K.A. f.6.3 lens .....	18.00	16.00
Kodak Junior Six-16, Series III, K.A. f.4.5 lens .....	29.50	25.00
Kodak Senior Six-20, K.A. f.7.7 lens .....	17.00	15.00

### EXAMPLES OF OTHER PRICE REDUCTIONS

### KODAK SENIOR

	WAS	NOW
Kodak Senior Six-20, K.A. f.6.3 lens, Diomatic shutter .....	\$21.00	\$19.00
Kodak Senior Six-20, K.A. f.4.5 lens .....	28.00	25.00
Kodak Senior Six-16, K.A. f.7.7 lens .....	19.50	17.50
Kodak Senior Six-16, K.A. f.6.3 lens, Diomatic shutter .....	24.50	22.50
Kodak Senior Six-16, K.A. f.4.5 lens .....	32.00	29.00

### MINIATURES

Kodak Bantam, K.A. f.6.3 lens .....	\$9.50	\$8.50
Kodak Bantam, K.A. f.5.6 lens .....	16.50	14.00
Kodak Bantam, K.A. Special f.4.5 lens .....	27.50	22.50
Kodak 35, K.A. f.5.6 lens .....	18.50	14.50
Kodak 35, K.A. f.4.5 lens .....	29.50	24.50

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for those who enjoy the  
best things in life.

• We invite you to try Blatz Old Heidelberg Special Pilsener Beer. Do it today. You'll find this pale, dry, sparkling beer just as good as its grand old name . . . It's just right. Even the tall, distinctive bottle snugly fits into your hand invitingly. Please accept this invitation. When ordering beer from your dealer, if you want the best, ask for Blatz . . . and we are sure you'll say it's the most refreshing, the most zestful, the most delicious beer you ever tasted

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**OLD**  
**HEIDELBERG**  
**BEER**

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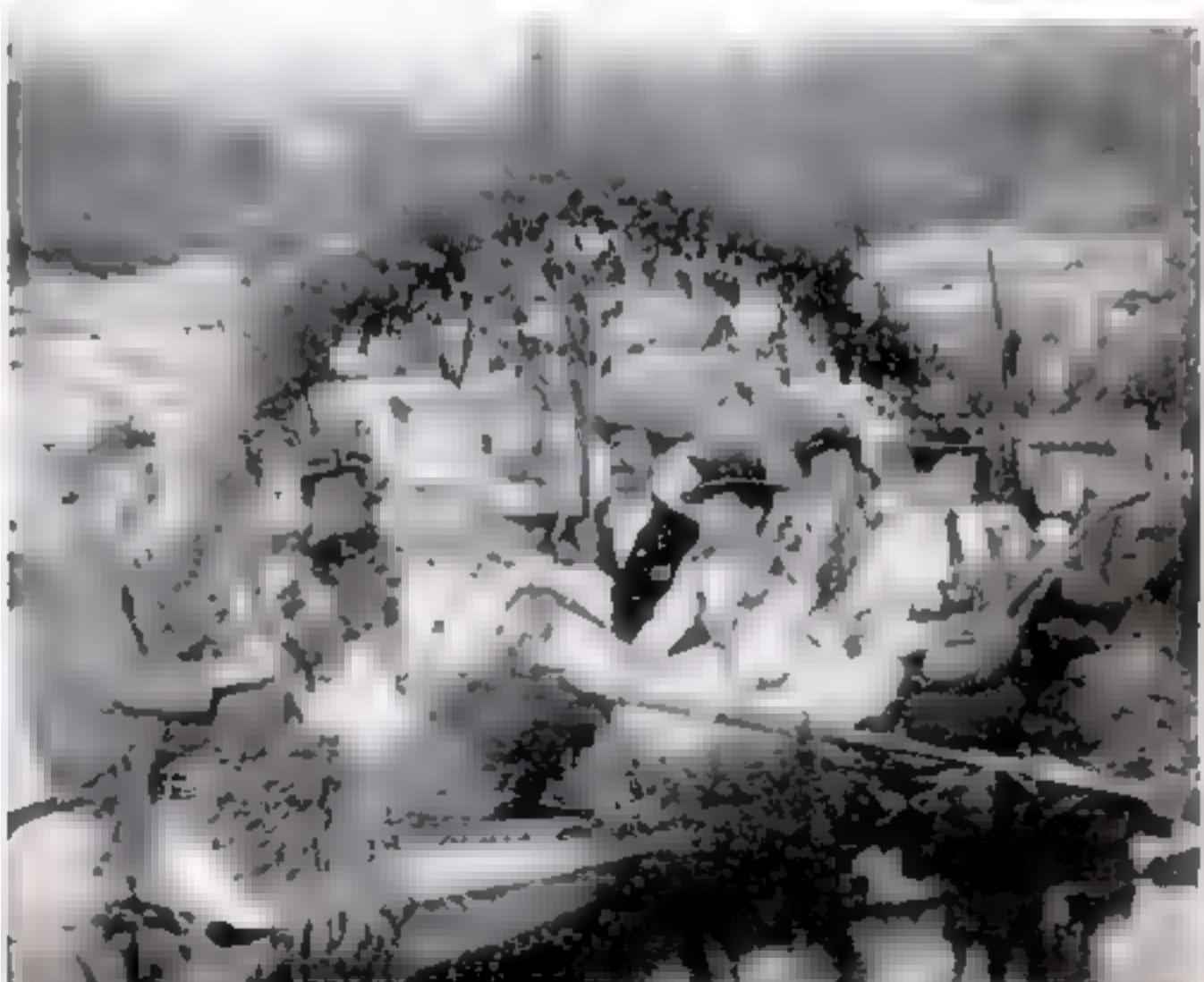
## AMERICAN YESTERDAYS (continued)



Niagara Falls drew photographers when the camera was new and today, after a century, is one of America's most popular picture subjects. This rare ambrotype was made in the 1850's. New York's first rogues' gallery used the same wet-plate process.



This little red schoolhouse in New England, with its prim teacher and pupils of assorted ages, was typical of rural America half-century ago when McGuffey's Reader and the Blue-Back Sprout were in fair price. Note the flat-top girls in plaited hair.



In the 1890's, a New Hampshire farm family loaded samples of their produce in a boat to celebrate a good year with a harvest festival. With flute, violin and banjo, they kept alive the Thanksgiving of their forefathers in an industrial New England.



**Mississippi steamboats**, here docked at New Orleans, carried manufactured imports north, plantations produce, especially cotton, south for export. The Mississippi was major U. S. trade lane until the 1880's when railroads established east-west routes.



**Ellis Island Madonnas** posed for Lewis Hine, documentary photographer, in 1905 when immigration was adding more than 1,000,000 a year to U. S. population. Quotas cut figure to 97,000 in 1930. U. S. foreign born still number more than 14,000,000.



Five thousand employees were on payroll of the National Cash Register plant at Dayton, Ohio, in 1910. N.C.R.'s paternalistic labor policies made it possible to rally employees for this picture. Women (notice foreground) were already big payroll factor.

## Definitely SEE-Worthy!



It's a Catalina Swim Suit  
made Figure Flattering  
with CONTROLASTIC®

Well worth a second look  
...It's Palm Carnival print  
in CONTROLASTIC rayon  
satin, for lasting "control."  
In blue, fuchsia, or chartreuse  
combinations. With half skirt, \$9 Maillot, as  
photographed, \$8.

EYES will pause for refreshment at the sight of a pretty figure sleeked and molded by a Catalina Swim Suit.

So decide to be beauty-at-the-beach this Summer... Make yours a Catalina. When you try one on you'll notice instantly that it does things for you... and how? Because CONTROLASTIC molds the figure more firmly due to its unique construction. Each tiny CONTROLASTIC

thread is made of wrapped layers of pure rubber instead of just a single strand. It's more resistant to the ravages of sun, air, water. CONTROLASTIC, product of the Firestone laboratories, is the "elastic that lasts!"

Write for the Catalina Style Booklet and the name of your nearest Catalina dealer. Pacific Knitting Mills, Los Angeles, California.

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HOLLYWOOD AND YOU  
*Catalina*  
SWIM SUITS  
WITH  
CONTROLASTIC  
PACIFIC KNITTING MILLS, LOS ANGELES, CAL.  
*This label pledges Multi-ply elasticity and figure control*

# YOUNG AMERICANS STUDY AMERICA

Springfield, Mo.  
has progressive education



SUPERINTENDENT STUDY

Picture two groups of schoolchildren. One is sitting stiffly in rows, memorizing Latin verbs. The second group, in another city, is standing with its teacher on the roof of a tall building. Below, the children see both sides of the railroad tracks. They see the pattern made by the business

and industrial zones, surrounded by the greener residential districts. They go down to the street, explore their city at close range. Then they go back to their classrooms, compare notes, discuss what's right and wrong with the city and what to do about it. The first group, meantime, is still memorizing verbs.

This is the difference between old and new education.

Springfield, Mo., is a fairly typical American city. Most of its 48,000 people are native stock. It is not as rich as most towns of its size. But Springfield is outstanding as one of the cities in America where progressive methods of education have been adopted for the entire public-school system.

What is Progressive Education? No two educators define it alike. But they agree that it is based on the theory that schools should be adapted to the needs of children and of the increasingly complex society in which they are being trained to live. This theory is not brand-new. It has been practiced for more than 20 years, but mostly in exclusive private schools.

Harry Study, Superintendent of Schools since 1924, is chiefly responsible for Springfield's program. Superintendent Study did not require costly new equipment nor a highly paid staff. He worked with what he had and introduced new methods gradually.

Through the year, more than 50 citizens come to Springfield schoolrooms to explain their various businesses and professions. To Home Economics classes, local shoe merchants and dressmakers bring their wares, advise students how to get the most for their money. Like any good progressive school, Springfield still teaches not only discipline and self-control but also the three R's, spelling and even Latin verbs. But it never loses sight of the goal of all its teaching: to equip students for happy and responsible lives.

For years America, clinging to its faith in free and universal education as the foundation of democracy, has been hard pressed to build enough schools for its swiftly expanding population. In the last 20 years alone, more than \$5,000,000,000 have been spent on new schools. America has incomparably the greatest educational plant in the world. Now, with population growth slowing, it has time to think about what, and for what, its children are being taught. With such first-hand, broad-gauge training in life and citizenship as Springfield schools are giving, young Americans—and America—can face the future confidently.



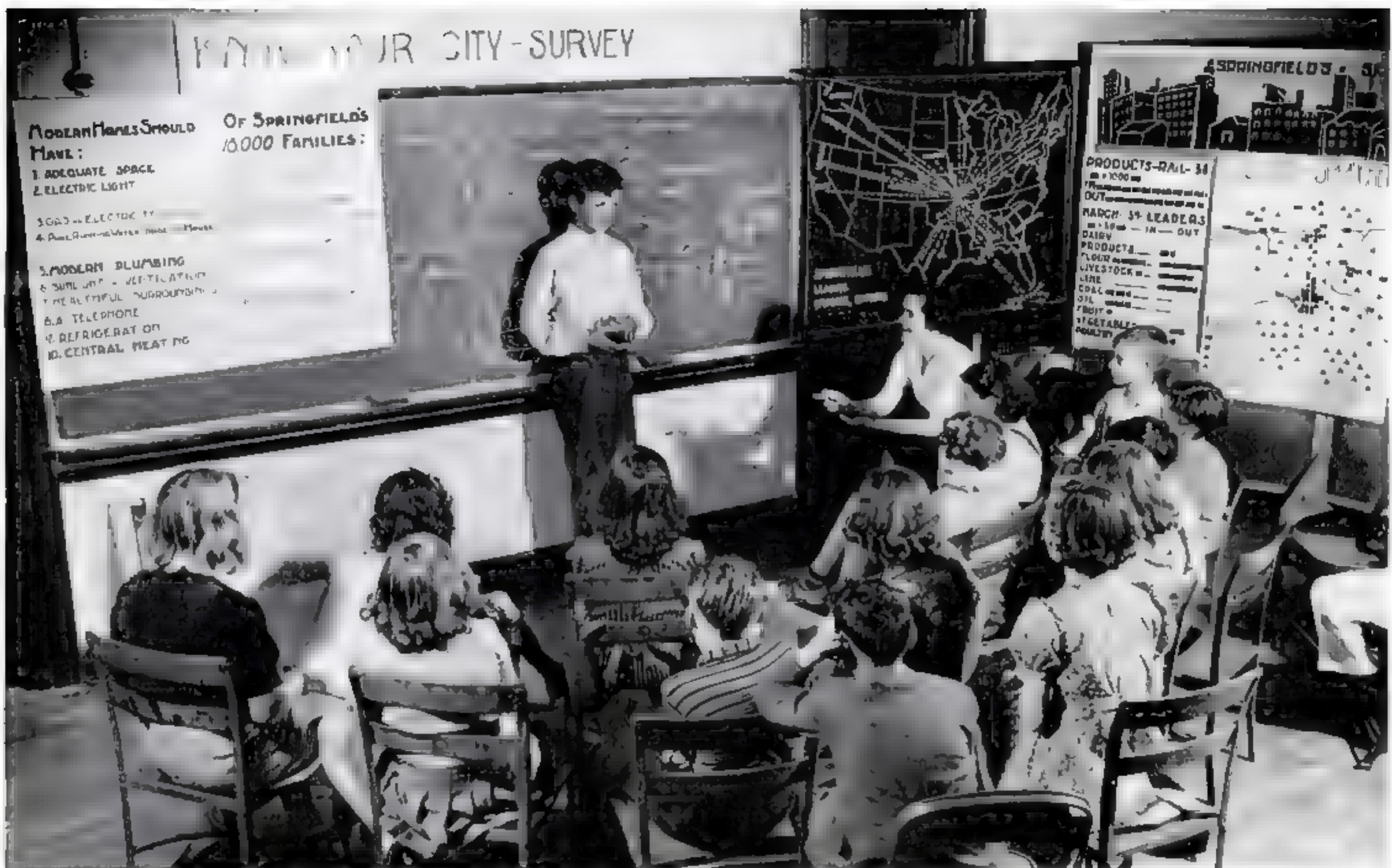
Theory of strip farming is explained by this fifth-grader to his classmates who live in a region where soil conserva-

tion is a vital problem. His diagram shows how soil is kept from washing away by planting grass between crops.

As practical soil conservation, these Springfield schoolboys help a farmer build check-dams to keep his fields from

being gutted by rains. Such outdoor lessons give the children a healthy sense of participation in their community.





"Know your city" surveys are quite popular in Springfield schools. Here sixth-grade pupils have just returned from

a city excursion and will spend several days discussing it with their teacher (seated by map). Boy standing is giving

ing a class report on local housing problems. Scenes below show children learning first-hand how their city works.



THEY INVESTIGATE POOR HOUSING CONDITIONS



THEY SIT IN COURT TO STUDY LOCAL JUSTICE



THEY INSPECT A NEW SEWAGE-DISPOSAL PLANT



THEY STUDY FIRE CONTROL FROM A FIRE TRUCK



THEY INSPECT SPRINGFIELD'S BUSY STOCKYARDS



THEY INVESTIGATE GOOD HOUSING CONDITIONS

## PROGRESSIVE EDUCATION

(continued)



**First-graders study railroading** by building their own train in classroom and improve their arithmetic by buying tick-

ets with paper money to go different places. The teacher sits at "Information" table ready to answer questions. Passen-

gers board the train while "Conductor" punches tickets. In front, fireman oils the works of the "Sunnyland Express."



**What makes an engine go?** First-graders are taken to the Springfield station, where they have an exciting time asking this Frisco Line engineer all sorts of questions. This is a yearly event.



A rest period after lunch produces scenes like this in Springfield's first and second-grade classrooms. Children lie down for 15 minutes, seldom sleep but are required to keep still.



THIS 1783 MAP WAS PUBLISHED IN LONDON FIVE MONTHS BEFORE SIGNING OF TREATY OF PARIS WHICH FIXED UNITED STATES BOUNDARIES AFTER THE REVOLUTION

## AMERICA IN MAPS: BIRTH AND GROWTH OF A NATION IN SHORTHAND OF HISTORY

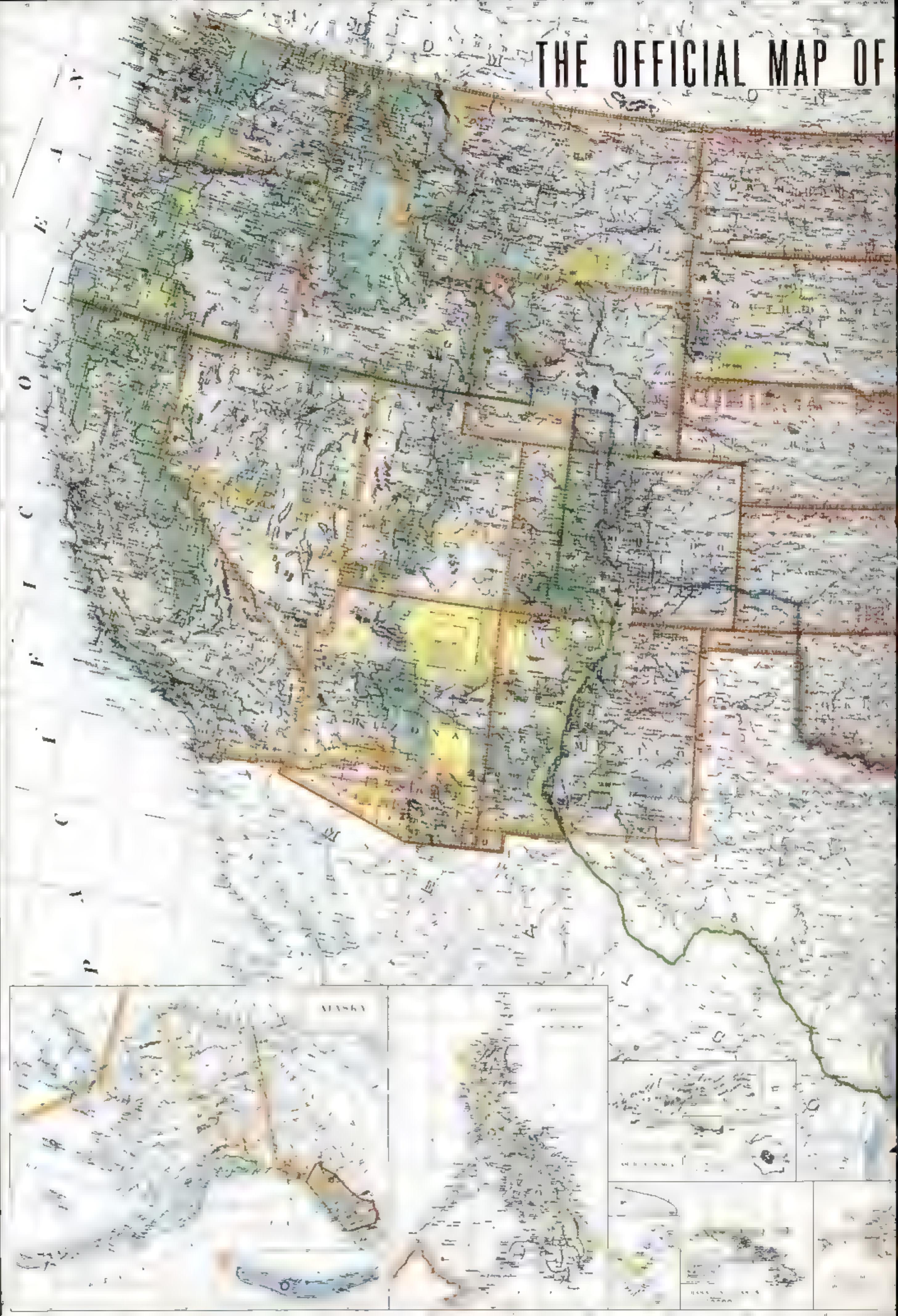
Maps exist primarily to show where places and things are. But they are also the shorthand of history, compact recordings of the world's great movements and struggles of peoples. To informed American eyes, maps of the United States present not mere boundaries and topography but the greatest heroic drama of modern times—the thrusts of

the explorers, the march of the pioneers, the sweep of the empire-builders who conquered a wild continent and lifted America to first rank among the nations of the earth.

In 1783 the map of 1783 above—with its numerous antis and spottings and outlandish Indian names, still ignorant and exotic. But its very coarseness hails to the heroism of hundreds of explorer-pioneers who for nearly 300 years had been skirting the coasts and pushing inland into this unknown wilderness, charting their wanderings and discoveries, adding bit by bit to knowledge of the new land. And for Americans it holds the particular thrill of representing one of the first appearances on the world-maps of "The United States of America." The terms of the treaty which fixed the boundary of the new nation at the Mississippi were substantially agreed upon on Nov. 30, 1782. This map was promptly engraved in London, and published five months before the treaty was finally signed in Paris on Sept. 3, 1783. John Jay—one of the American negotiators, brought the map back with him when he returned

to report to the Continental Congress on the treaty. How Americans swept onward across the continent, buying and wresting ever more land from the Indians, Spanish and French, and finally pushing out into the Pacific and West Indies, is shown in the map on the following pages. This is the latest Official Map of the United States. Though dated 1908, the tremendous work of compiling and engraving it has only now been completed. LIFE, by arrangement with the Department of the Interior, is here privileged to give it its premier showing. The Official Map shows historic territorial acquisitions, all national forests, parks, monuments, reservations and other areas of the public domain, which still comprise one-fourth of the nation's land; and the standard sized townships and sections into which America is divided. Some 17,000,000 acres in the continental U.S., plus 37,000,000 in Alaska, remain to be surveyed. This newest map adds the results of \$2,000,000 worth of Government surveying of new lands and new boundaries to the 1906 edition. A full-sized copy of it, measuring 5 by 7 ft., may be obtained from the Government Printing Office for \$2.

# THE OFFICIAL MAP OF



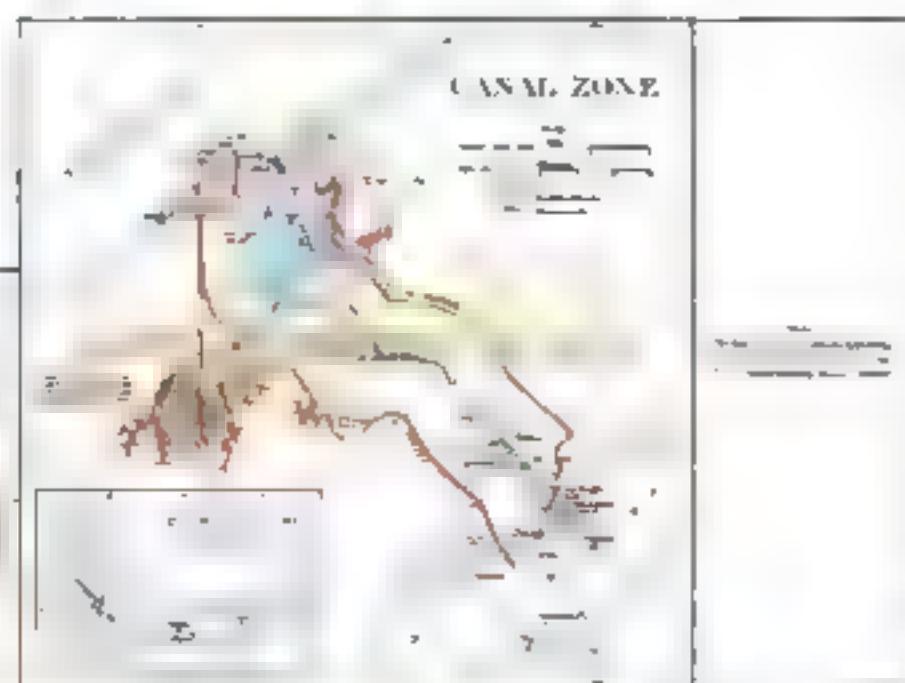
# THE UNITED STATES OF AMERICA—1939

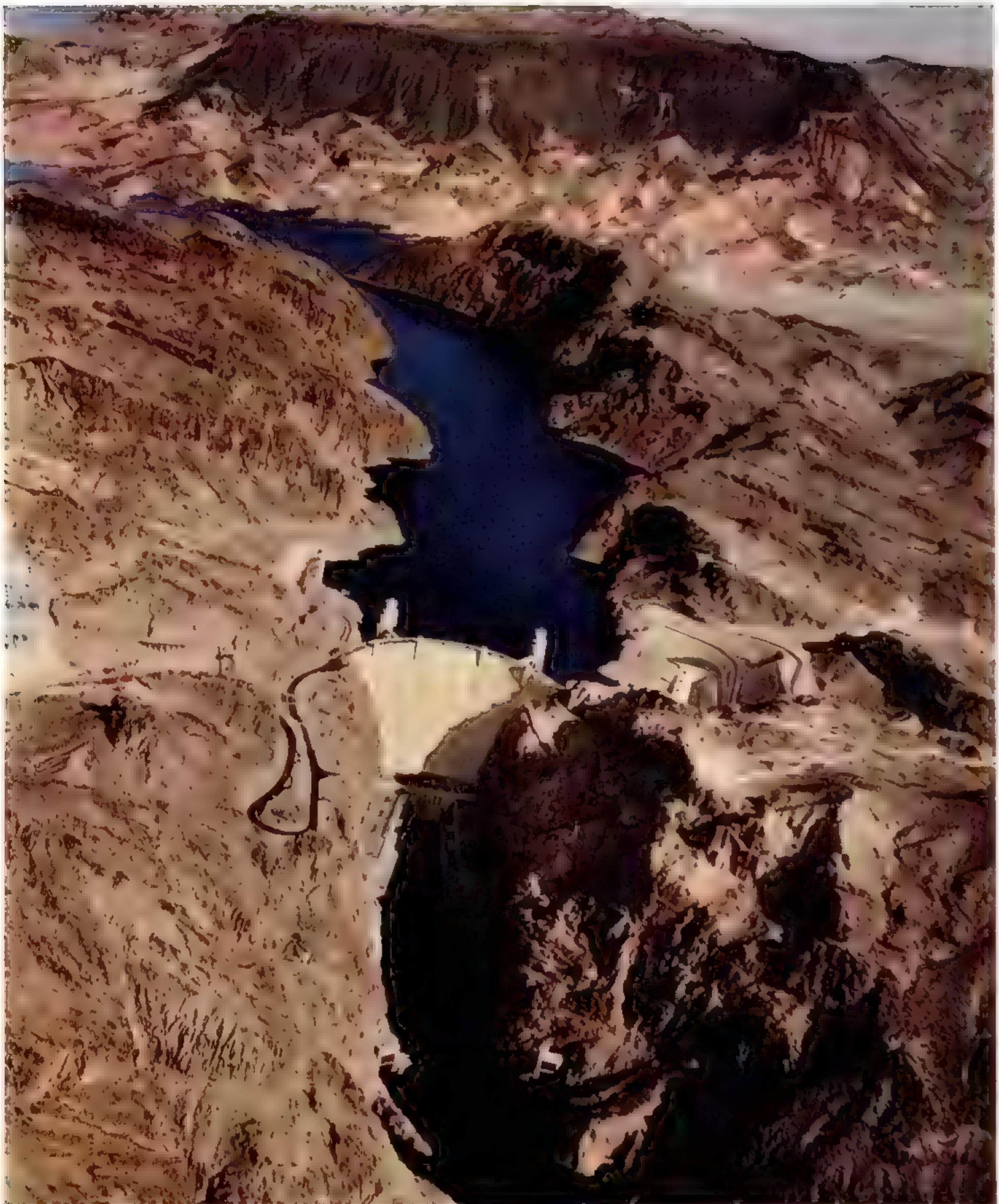
UNITED STATES  
DEPARTMENT OF THE INTERIOR  
HAROLD L. ICKES, SECRETARY  
GENERAL LAND OFFICE  
FRED W. JOHNSON, COMMISSIONER

## UNITED STATES TERRITORIES AND INSULAR POSSESSIONS

PUBLIC DOMAIN  
BUREAU OF THE CENSUS  
NATIONAL PARK AND MONUMENTS  
NATIONAL FORESTS  
NATIONAL RECREATION AREA  
1939

G R E E N O F M E X I C O





**BOULDER DAM** Largest structure ever built by man, Boulder Dam in the Colorado River at the border between Arizona (right) and Nevada (left) takes high rank among the man made wonders of America. In height (727 ft.) and water storage capacity (30,500,000 acre-ft.), this \$76,500,000 U. S. Government project completed

in 1936 outstrips any dam now building or contemplated. Enough concrete was used in it to lay a 16 ft. wide road from Miami, Fla., to Seattle, Wash. It has piled up behind it the world's largest artificial lake (Lake Mead), 115 mi. long and up to 8 mi. wide. Some of this water is pouring through giant turbines at the base of the dam to produce a peak 4,330,000,000

kilowatt-hours of electricity per year for Arizona, Nevada and Southern California. Some is being or will be channeled off—notably through the 80-mi. All-American Canal to California's Imperial Valley—to irrigate an available 1,900,000 acres of rich but arid land in the three States. Other uses: flood and silt control, drinking water, navigation, recreation.

# THE AMERICAN DESTINY

BY WALTER LIPPmann

Here in these pages of LIFE there are displayed the things which elsewhere in the world the nations stand in arms to conquer or to defend. A people with a long habit of freedom holds securely in its possession the space to live, a fertile soil, invested wealth, the technical arts, everything that a nation could need. Yet something is wanting. And for want of it the American people are profoundly troubled. They know that they are not making the most of their opportunities. They know that for lack of clear purpose and a confident will they are falling far short of what they have a right to expect of themselves. They are not at ease in their consciences. They know that with such resources, such riches, and such power they are stalled, whereas they should be in action against poverty, and the stagnation of enterprise, and the crumbling of law and civilized custom in the world all about them.

The American spirit is troubled not by the dangers, and not by the difficulties of the age, but by indecision. Considering the resources with which nature, and the accumulated achievements of the past, and historic fate have endowed America, there ought to be no question in anyone's mind about the American future. Yet in the generation to which we belong, unlike any that went before, the American people have no vision of their own future. Lacking this, they are seized by deep uncertainty. They are confused by their problems. They are oppressed by doubt. They are living anxiously and unclearly from day to day, feeling that the strength within them is being wasted, is throttled, is suffocated, that they are dedicated to no great ends, that they have no sure faith that enlists the young. This mood will pass. But while it obsesses the American spirit, the people are making themselves sick with nervous indecision.

The immediate cause of this indecision is, I believe, the accumulated disappointments of the post-War era. Three times in these twenty years the American people have had a great hope and three times they have been greatly disappointed. They believed with Wilson that they could help to make a world that was safe for free men living in peace under just laws. They believed with Coolidge and Hoover that they had arrived at a New Era of certain and advancing prosperity. They believed with Roosevelt that they were organizing securely an abundant life for all the people. For the moment they are disillusioned and believe nothing in particular. When they are reminded how great are their resources, how splendid are their achievements, how decisive is their power in the world, they are embarrassed by the opportunities they are not using and by the challenge of a high destiny to which they are not responding.

Far from feeling inspired by the riches of the American earth, the generation to which we belong is now frightened by its fertility. It is as if this continent had raised up something too great for little men to deal with. For twenty years, under the influence of disappointed hopes, the people have worked themselves into a state of mind where today their ideas and their policies are dictated by a dread of the fertility of nature, by fear of the industry, the thrift, the inventiveness and the enterprise of men, by alarm at the prestige and the power of the nation. The attitude of the American people at this moment is one of recoil from those very constituents of greatness which vigorous peoples have hitherto everywhere and always struggled to obtain.

They have let themselves be persuaded that in every phase of their activity they are threatened by the expansion of their power and must contract it, that they must withdraw, retreat, fence in, batten down, plow under, work less, save less, invent less, invest less, and risk nothing. For the moment, this moment of bewildered indecision through which we are now living, the American people are acting on the assumption, though in their hearts they reject it, that their incomparable assets are in fact their most dangerous liabilities.

That this is not a national policy but a national neurosis is evident when we realize that whereas the problems of other nations are the problems of insufficiency, our problems are the problems of superfluity. We seem to have too much of everything. We seem to have too much land. The land seems to be too fertile. We have taken elaborate measures to reduce the yield, and we do not know how to dispose of the surplus. We seem to have too many factories, and the machinery seems to be too efficient, and we seem to have too much labor. We rack our brains to devise schemes for limiting the output and reducing the work done by the worker. We seem to have too much capital, and we worry about how to reduce our savings and about how not to invest them where they will produce too many goods. We seem to be too inventive, and we study plans for slowing up technological progress. We seem to have too much gold, and we bury it in Kentucky. We seem to have too much influence in the world and we examine devices for making ourselves as unimportant as possible.

In every field of our activity we have come to think that there is a surplus to be gotten rid of—a surplus of crops, of minerals, of industrial capacity, of gold, of savings, of credit, of labor, and of influence in the world. At the end of these twenty years our farm policy is an attempt to produce less and to dump the surplus. Our industrial policy is an attempt to protect old investments against the competition of new enterprise. Our fiscal policy, as conceived by those who direct it, is an attempt to reduce savings and to sterilize bank deposits and to bury gold. Our labor policy is an attempt to let more men work a little by making each man work less. Our foreign policy is regulated finally by an attempt to neutralize the fact that America has preponderant power and decisive influence in the affairs of the world.

However plausible a case can be made for this measure or that, the total effect is that the American people face the world not with their old confidence and courage, but in a mood of withdrawal, denial, defeat, and of wishing to escape from their opportunities and their responsibilities. This must be a transient mood. This must be the mood of a people whose minds and spirits are not yet adjusted to a radically new situation. Men say No to everything when they have not yet learned how, and have not yet nerveed themselves, to say Yes. For in the long run it cannot be true that a nation grows rich by not producing, by not working, by not saving, by not investing, by not being enterprising, by seeking only security and stability and protection from risks, by trying to be small and unimportant.

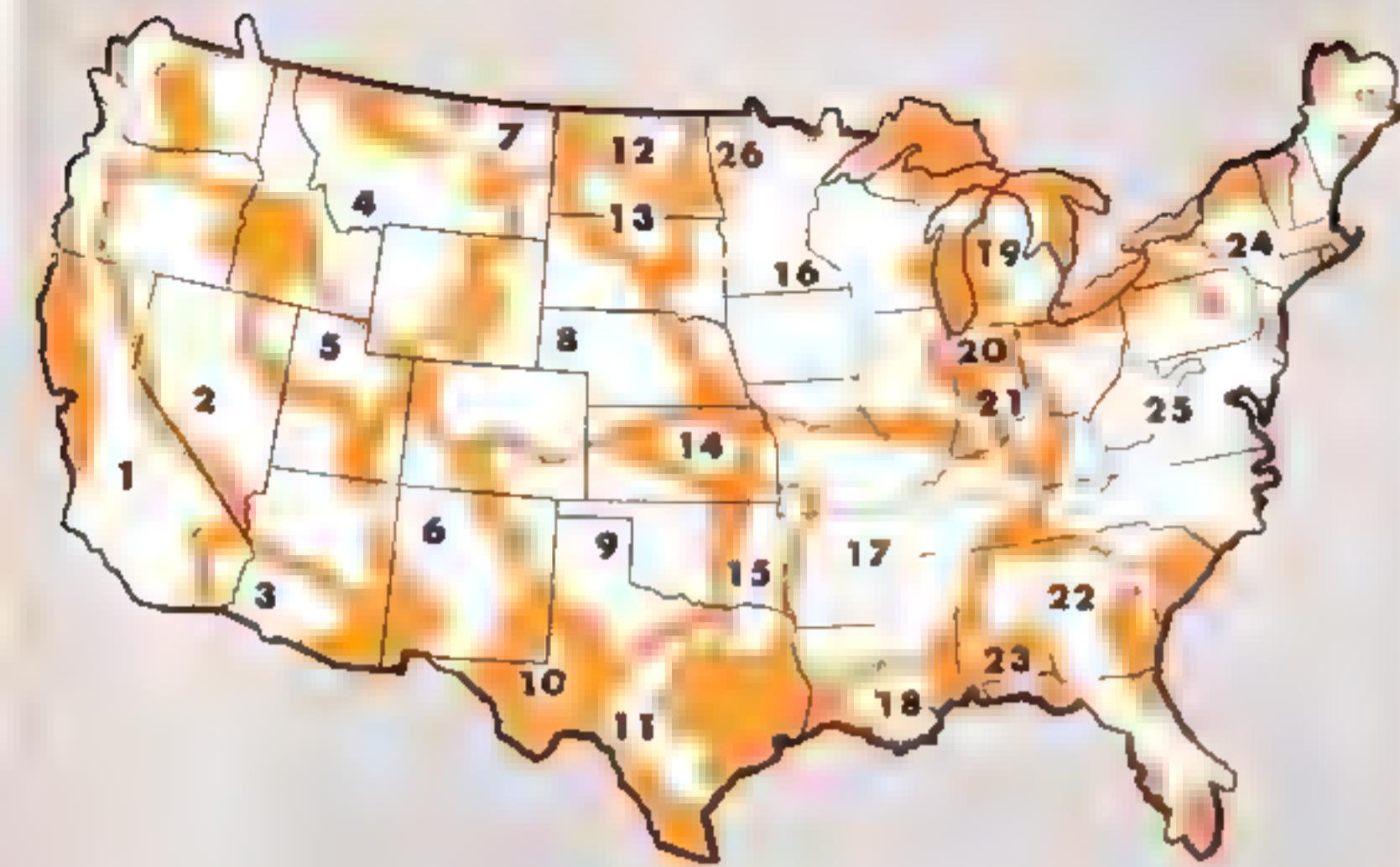
This cannot be the permanent attitude of the nation. It must be a passing mood, the curious mood of a peculiar epoch. For here is this continent, an island lying between two great oceans;

ILLUSTRATION BY PAUL COOPER

# AMERICA: HOW IT GREW



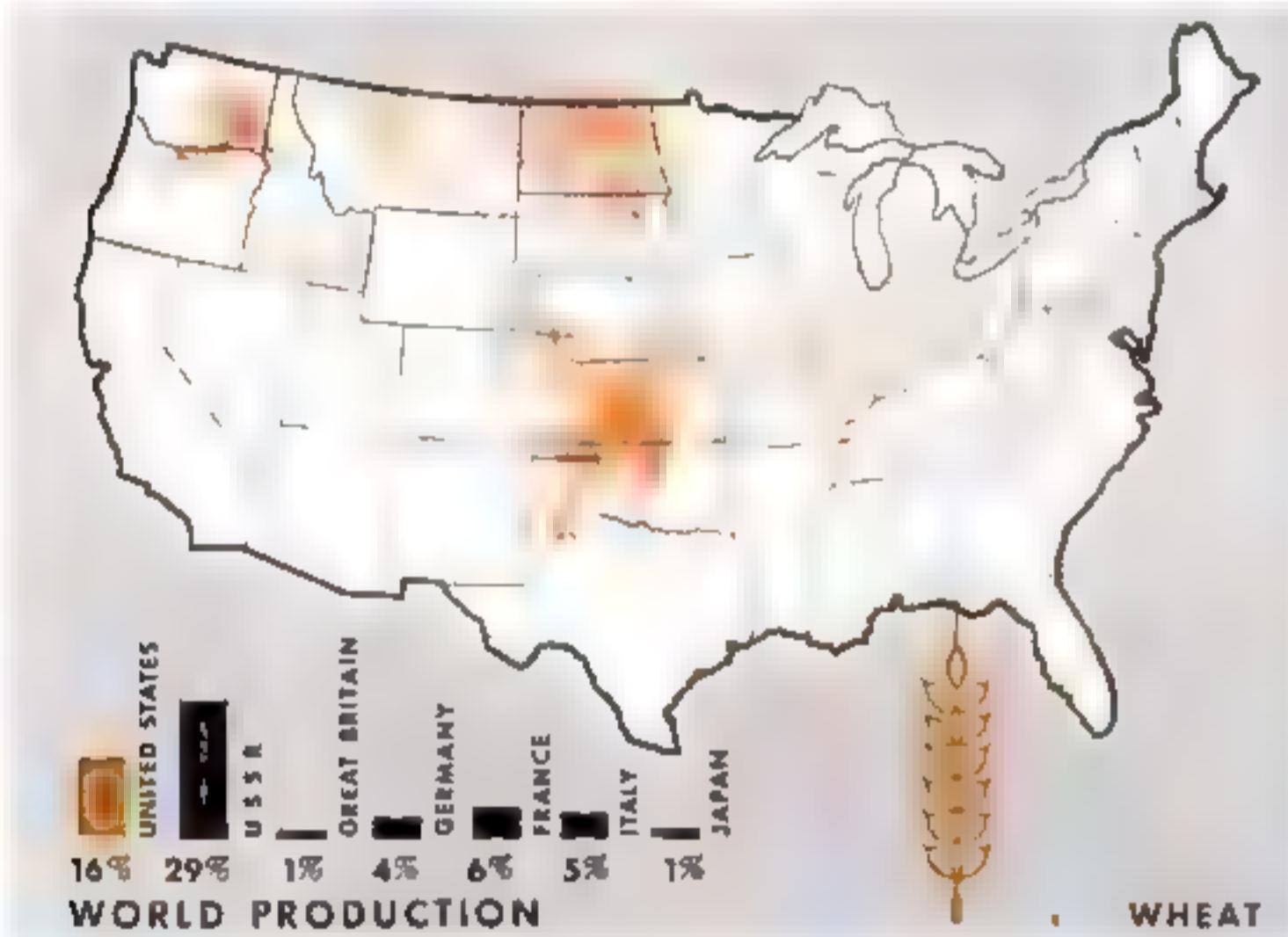




1. Norway	10. Denmark	19. Ireland
2. Sweden	11. Greece	20. Turkey in Europe
3. Hungary	12. Belgium	21. Switzerland
4. Finland	13. Lithuania	22. Italy
5. Bulgaria	14. Prussia	23. Albania
6. Yugoslavia	15. Portugal	24. England
7. Latvia	16. Germany	25. France
8. Poland	17. Spain	26. Netherlands
9. Rumania	18. Estonia	

#### EUROPE & AMERICA

The map of Europe excluding Russia, when dissolved into its political divisions, fits like a jigsaw puzzle on the map of America. (Note: East Prussia is separate because of the Polish corridor.)

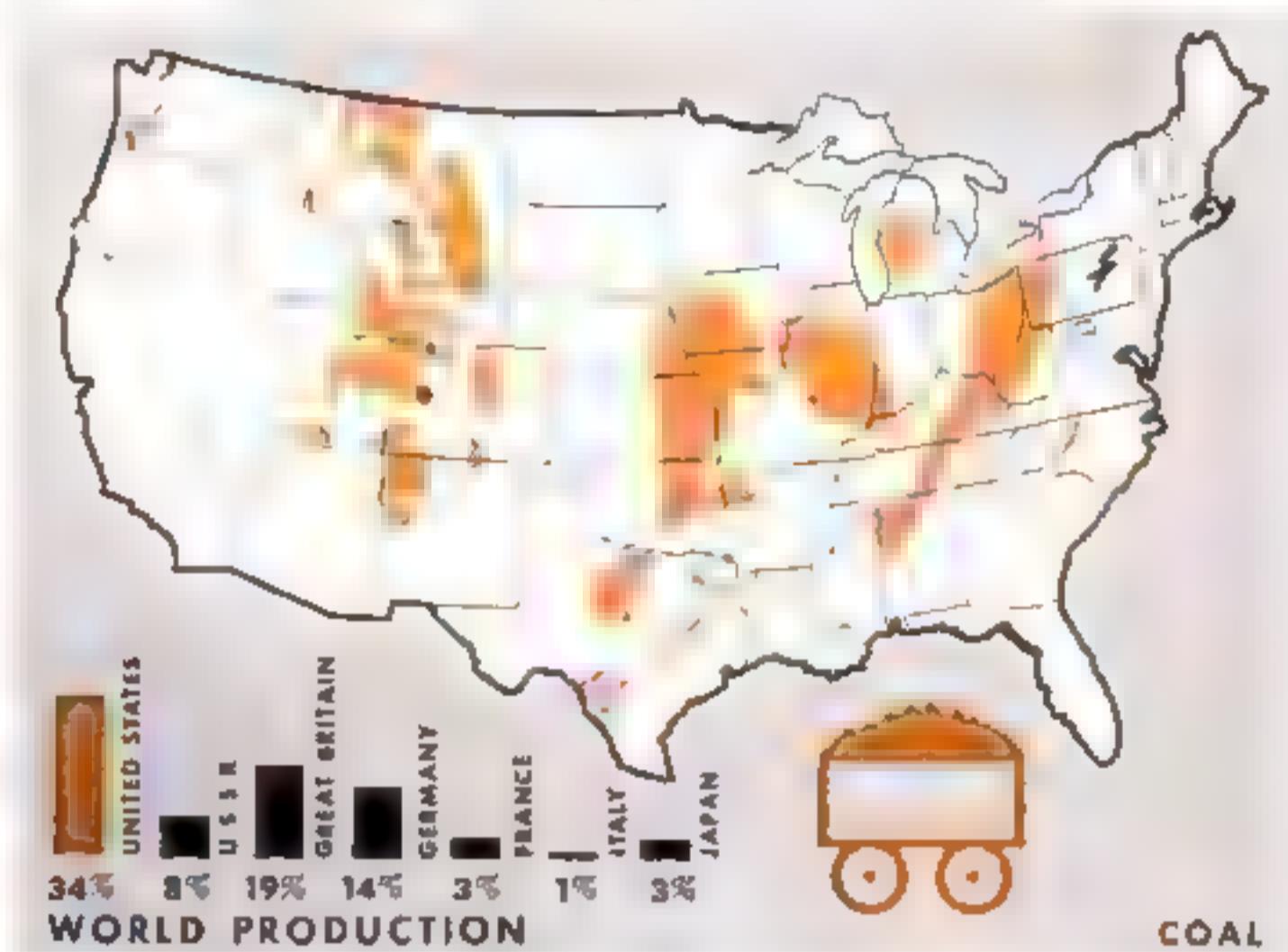


Kansas produces one-fifth of America's wheat. Next in order of production are North Dakota, Washington, Oklahoma, Nebraska. Each dot on map represents 10,000 acres of wheat.

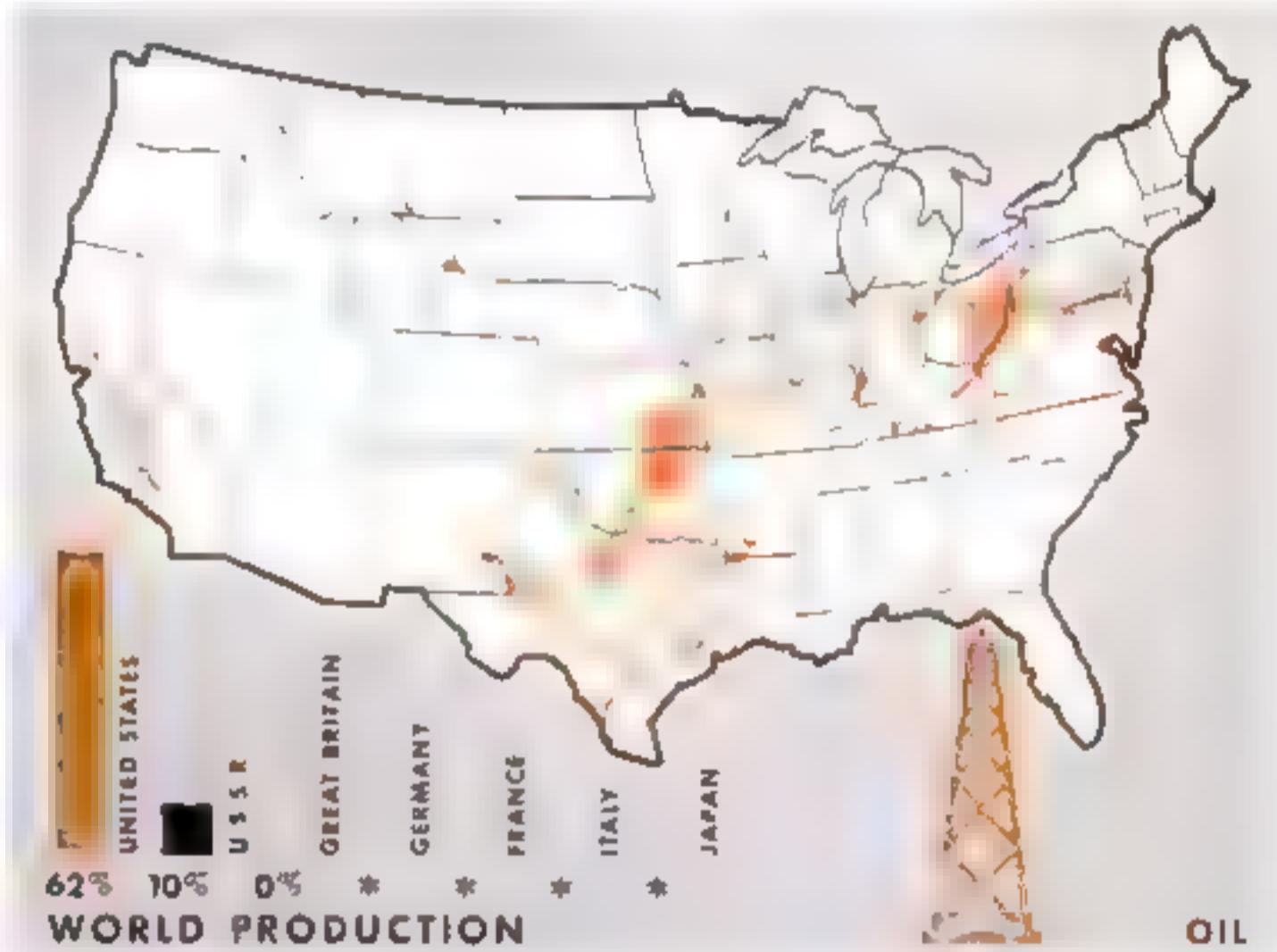
## AMERICA: RICH IN UNION

Every American has heard time & again that his country is "richer" and "greater" than any other in the world. The purpose of the maps on these pages is to show that the United States of America is so basically different from the rest of the world's nations that it can hardly be compared w.th them. By studying

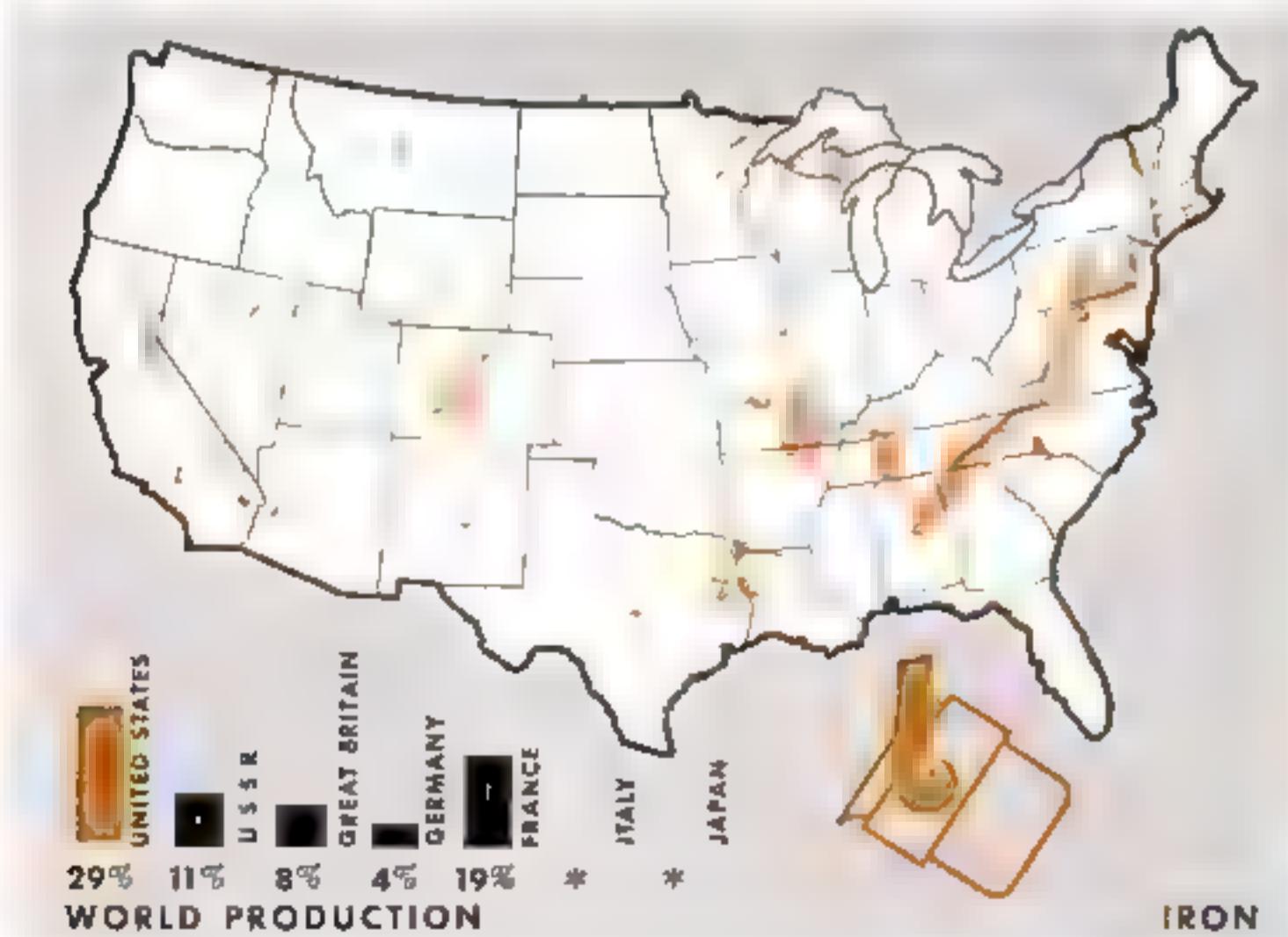
Production of less than  $\frac{1}{2}$  of 1% is indicated in tables by \*



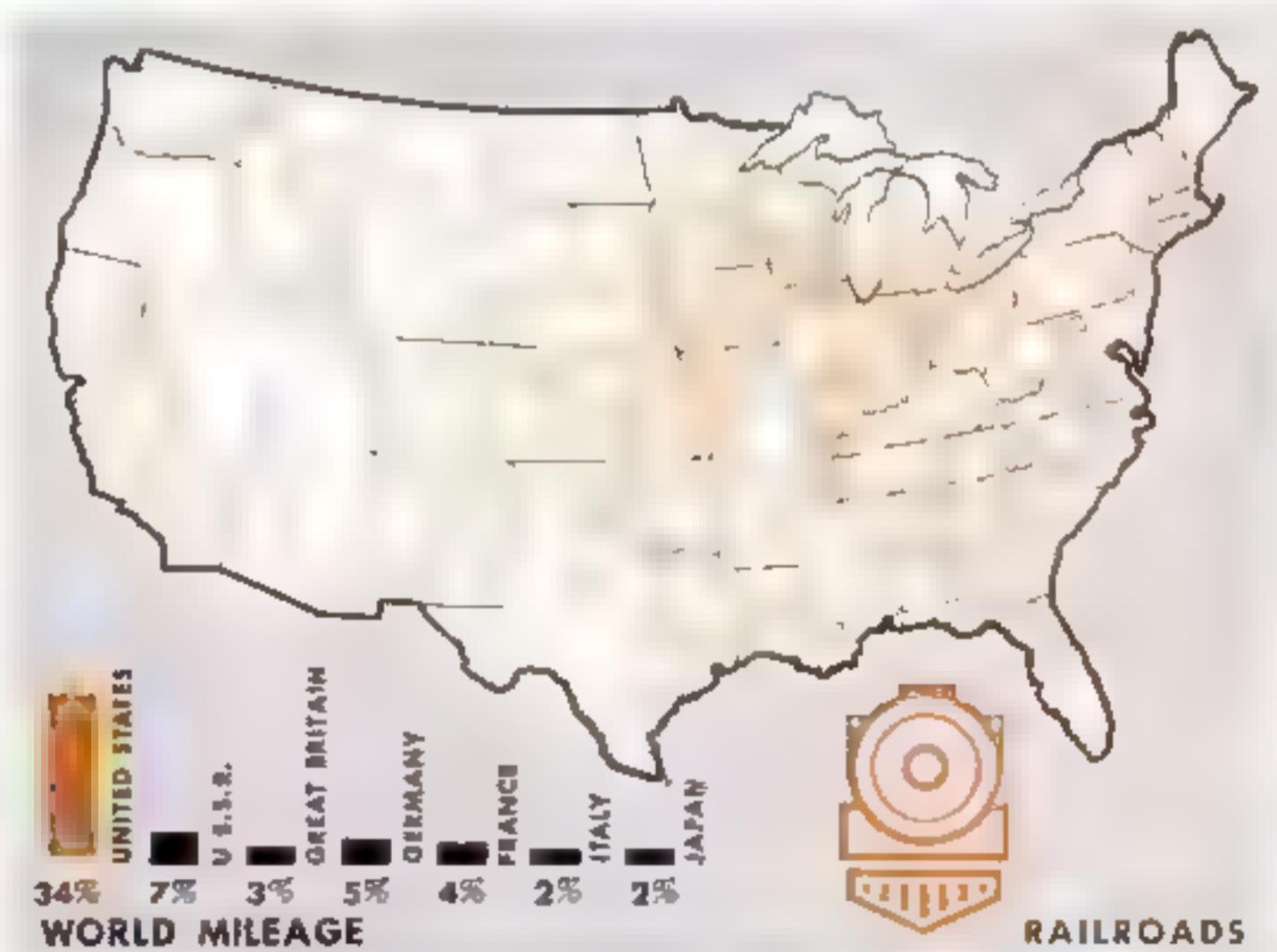
Bituminous (soft coal) fields are marked in orange, anthracite (hard) in black. Pennsylvania, with both kinds, is No. 1 coal State, though West Virginia produces more soft coal.



Texas, California and Oklahoma account for four-fifths of U. S. oil production. Map shows fields and main pipelines. Refining centers outside fields are shown by circle and dot.



The Lake Superior region produces over three-quarters of the nation's iron ore. Note that coal and iron distribution determine location of America's great steel-manufacturing centers.



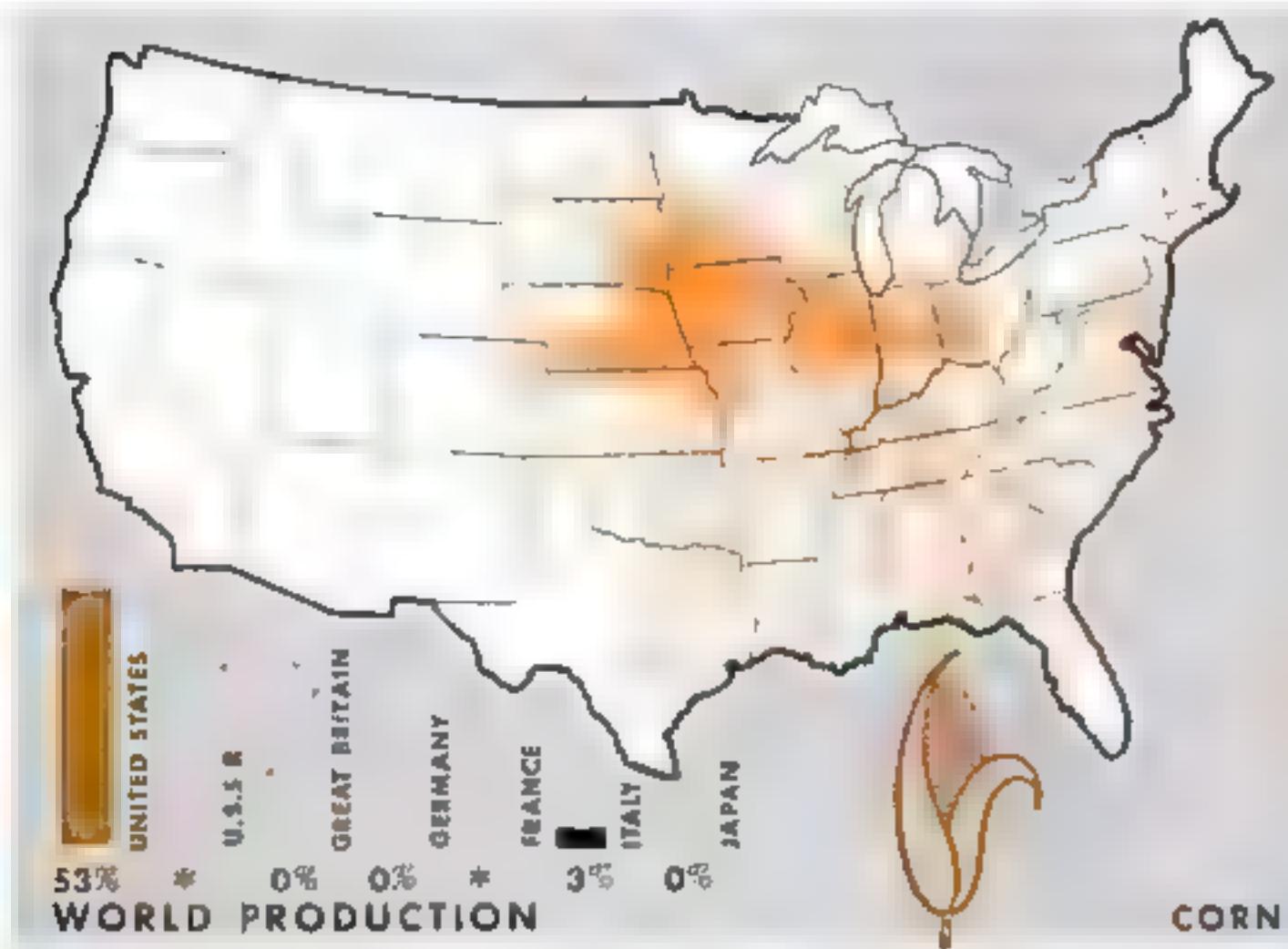
The maze on this map represents only the main lines of the 240,000 mi. of railway track which America has laid - nearly half again as much as the other six World Powers combined.

the map at left in connection with the other maps and tables, anyone can see what is wrong with Europe, what is right with America.

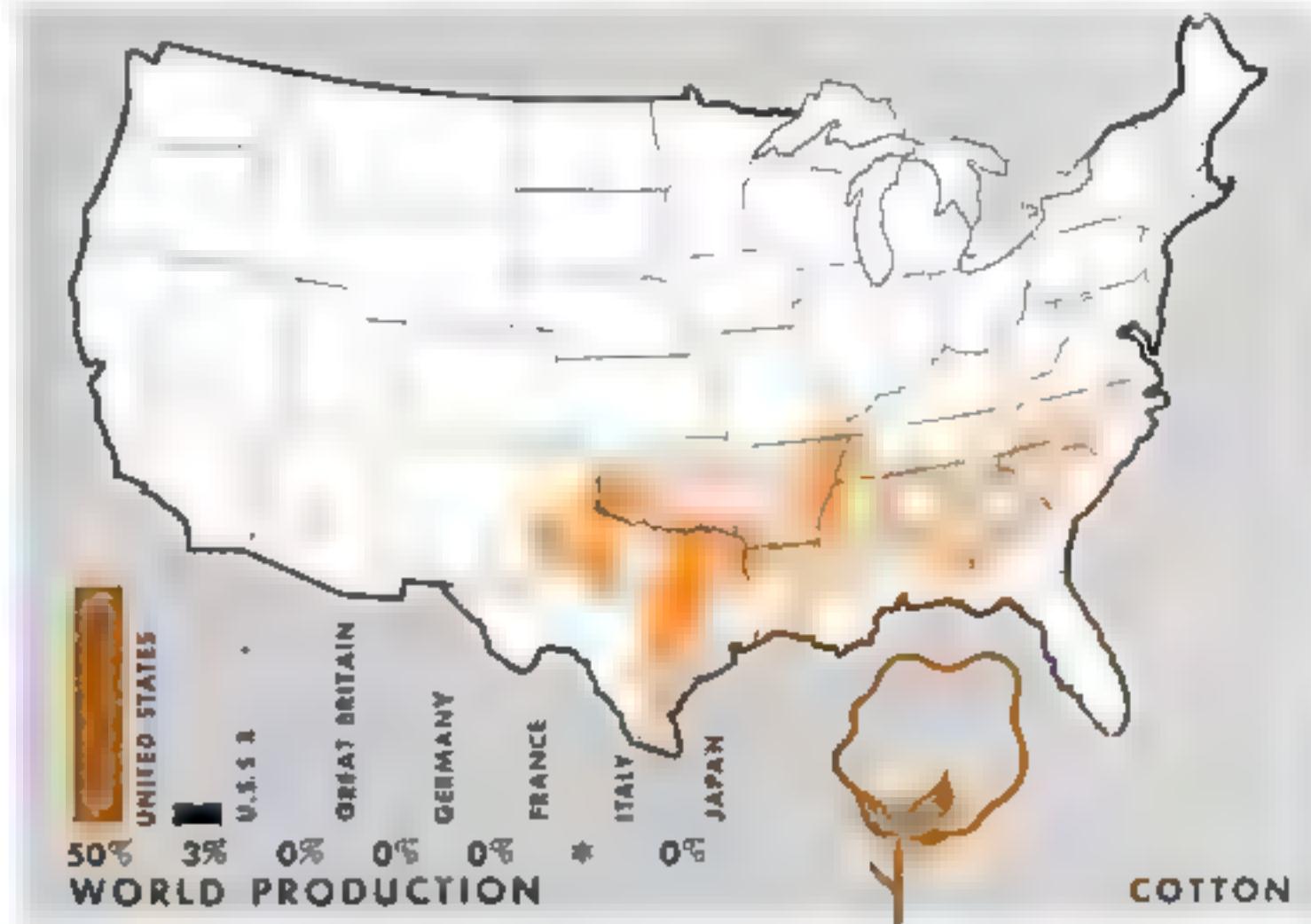
If the settlers of America had followed the European pattern, this country would now be a caldron of independent nations, some rich, some poor, but none possessed of the rounded supply of natural resources necessary for a balanced economy. Each would be piling up tariff barriers against the others, arming to guard what it had or to take by force what it lacked. If America is faithful to its des-

tiny, it may yet by example convince a war-weary world that the only way to peace and prosperity is through just such a political union of a great natural geographic-economic area as America has achieved.

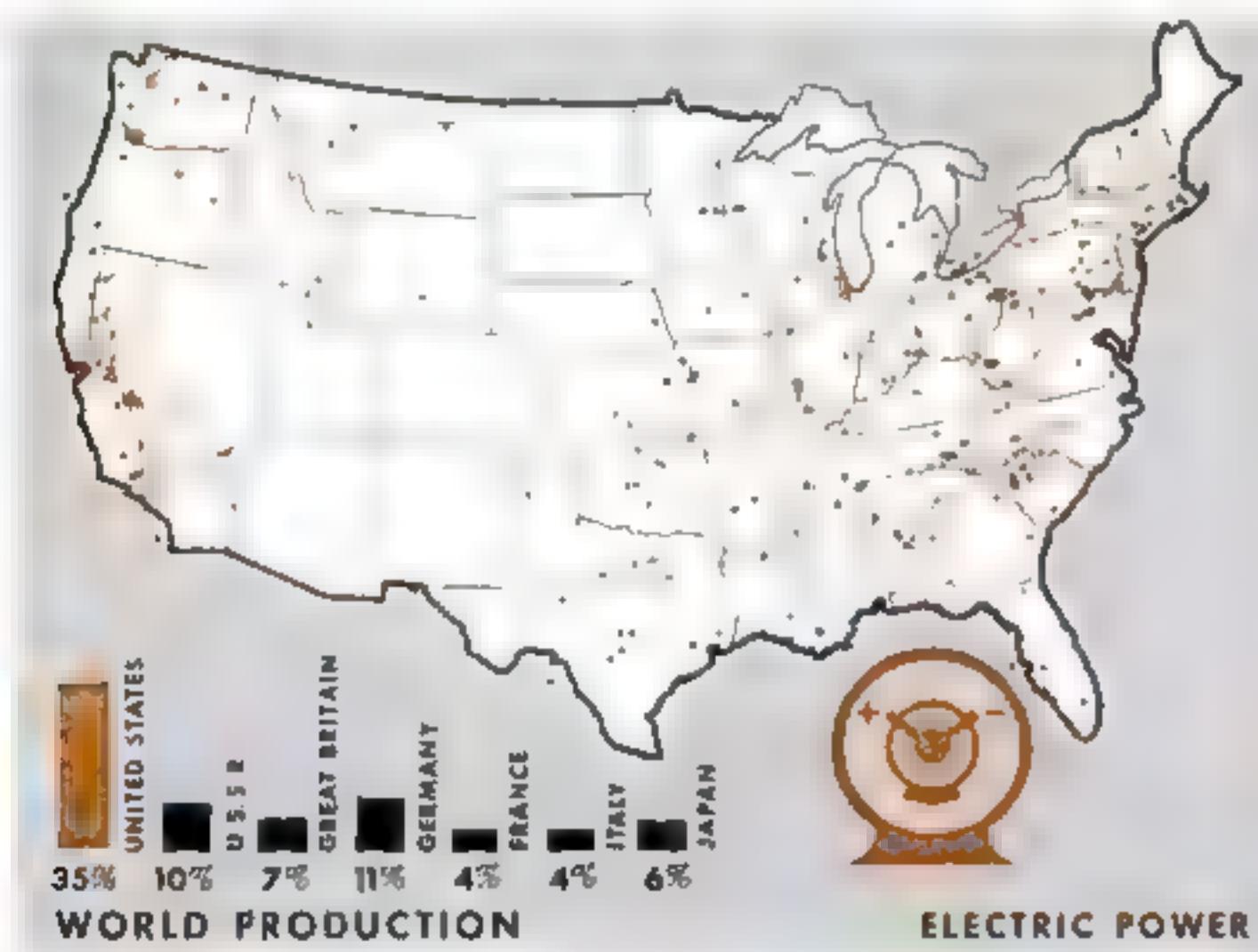
The tables of world production in the maps below, showing America's vast superiorities in resource and productivity over the other six World Powers, are based chiefly on figures compiled by Economist Stuart Chase for his recently published book, *The New Western Front*, a stirring plea for United States isolation.



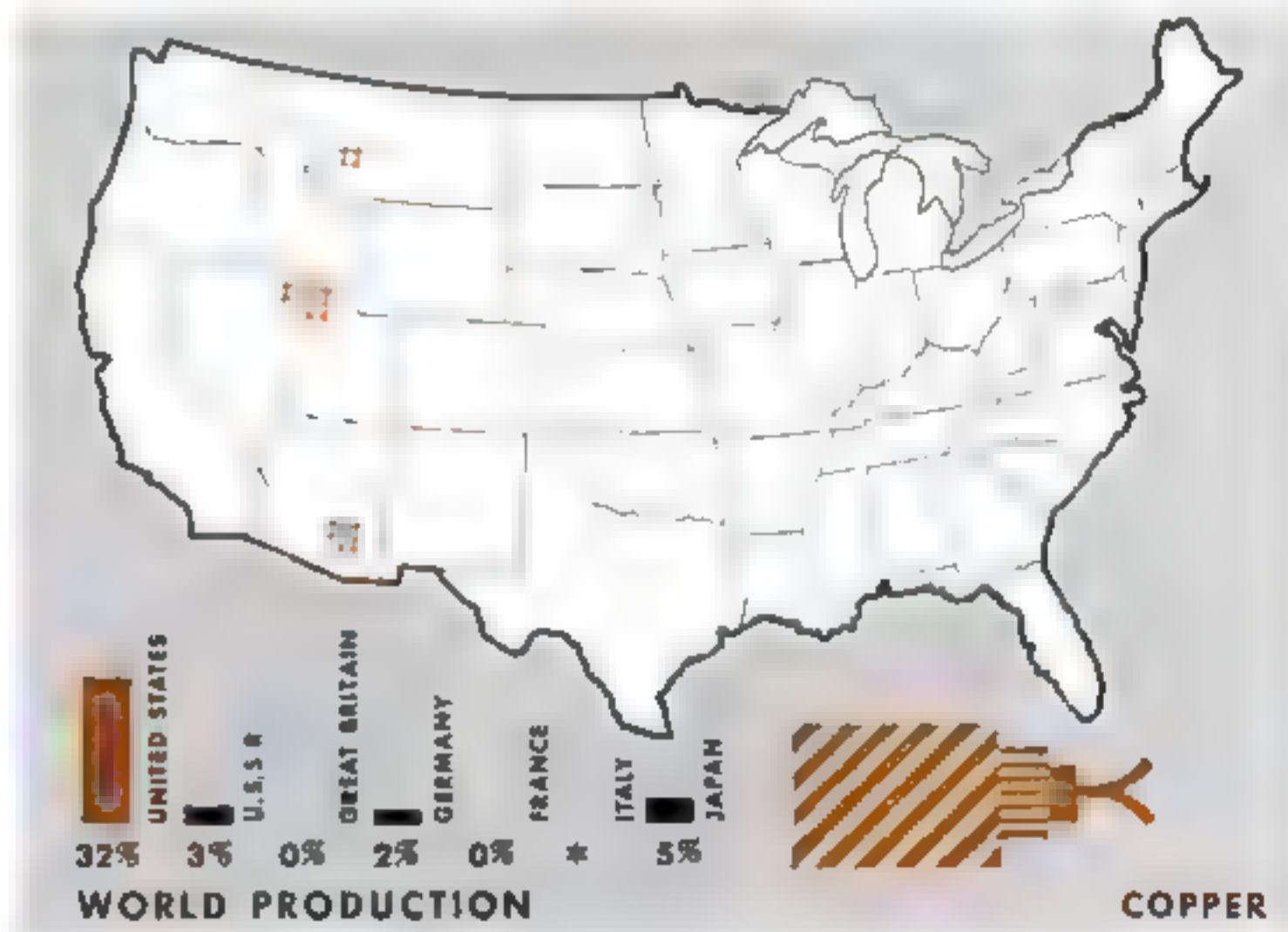
Corn is grown in all of the 48 States, but eight of them—Iowa, Illinois, Nebraska, Ohio, Indiana, Missouri, Minnesota and Kansas—produce almost two-thirds of the nation's crop.



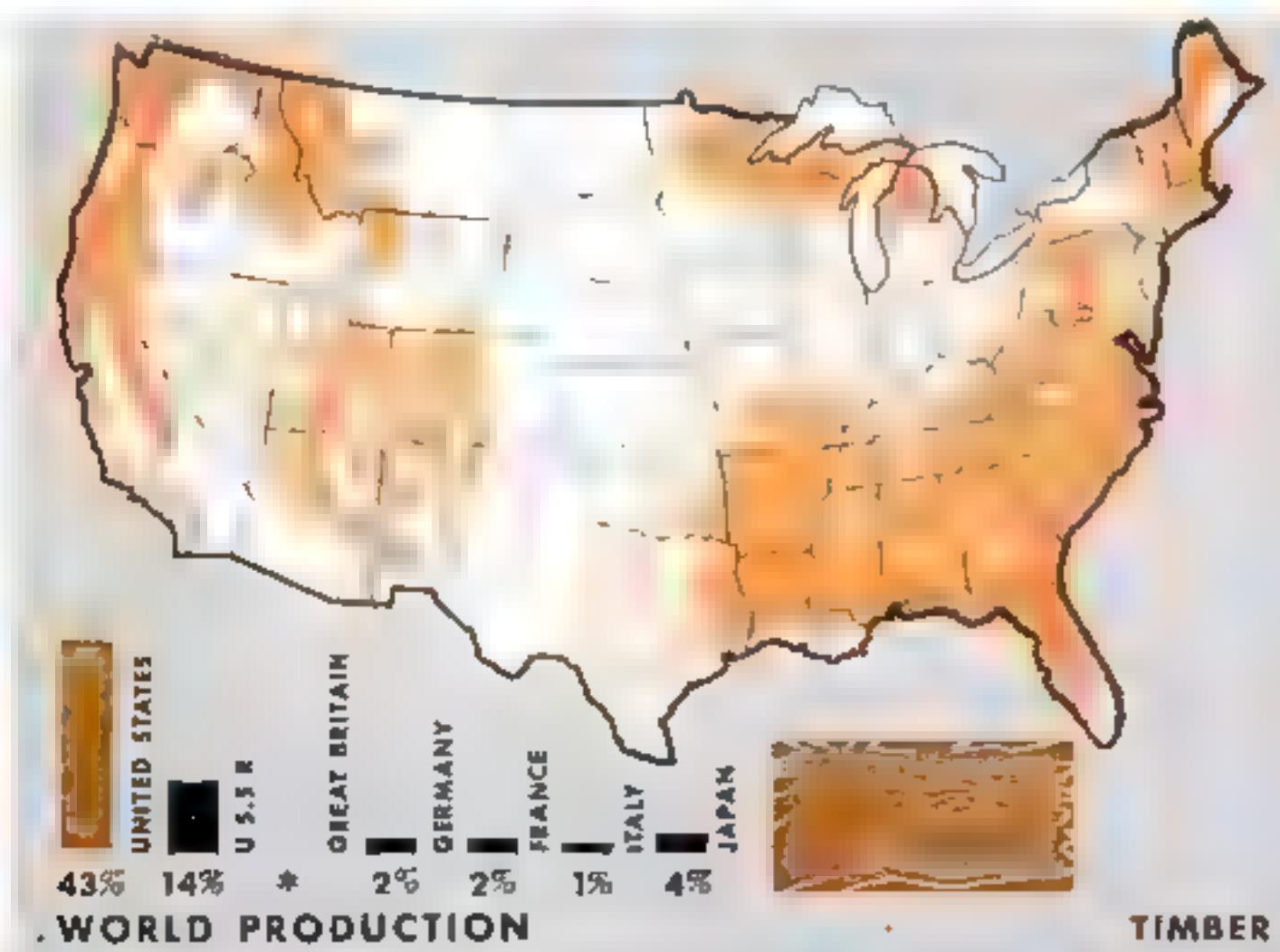
Texas produces nearly one-third of the nation's cotton. As in wheat, corn and timber maps, each dot above represents 10,000 acres. Other leading world producers, India, China, Egypt.



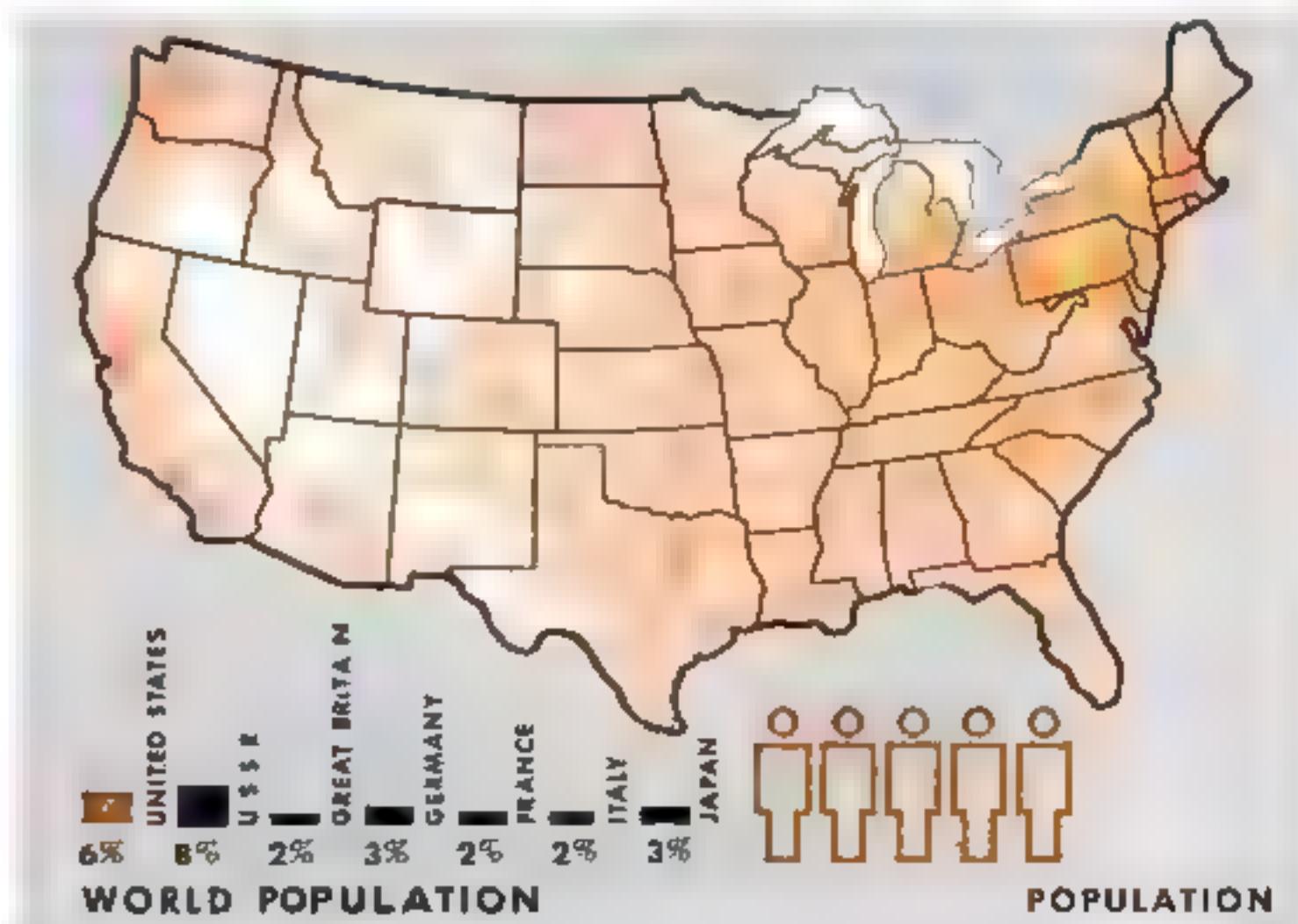
Power plants of more than 15,000-kilowatt capacity are shown in black, transmission lines of over 100,000-kilowatt capacity and chief metropolitan consumption centers in orange.



If the 48 States were 48 independent nations, four of them—Arizona, Utah, Montana and Nevada—would have a corner on over seven-eighths of America's present copper production.



Dots representing 10,000 acres of timber are close-packed on this map of still-woodsy America. Washington and Oregon account for one-third of the total U. S. lumber production.



America's national wealth is shared by people numbering only 6% of the world's population. On this map population density shades from less than 2 people per square mile to over 90.



PORTRAIT

OF AMERICA 1939



# THE FLOWERING OF THE VALLEY

Iowa trains creative artists



DEAN STODDARD

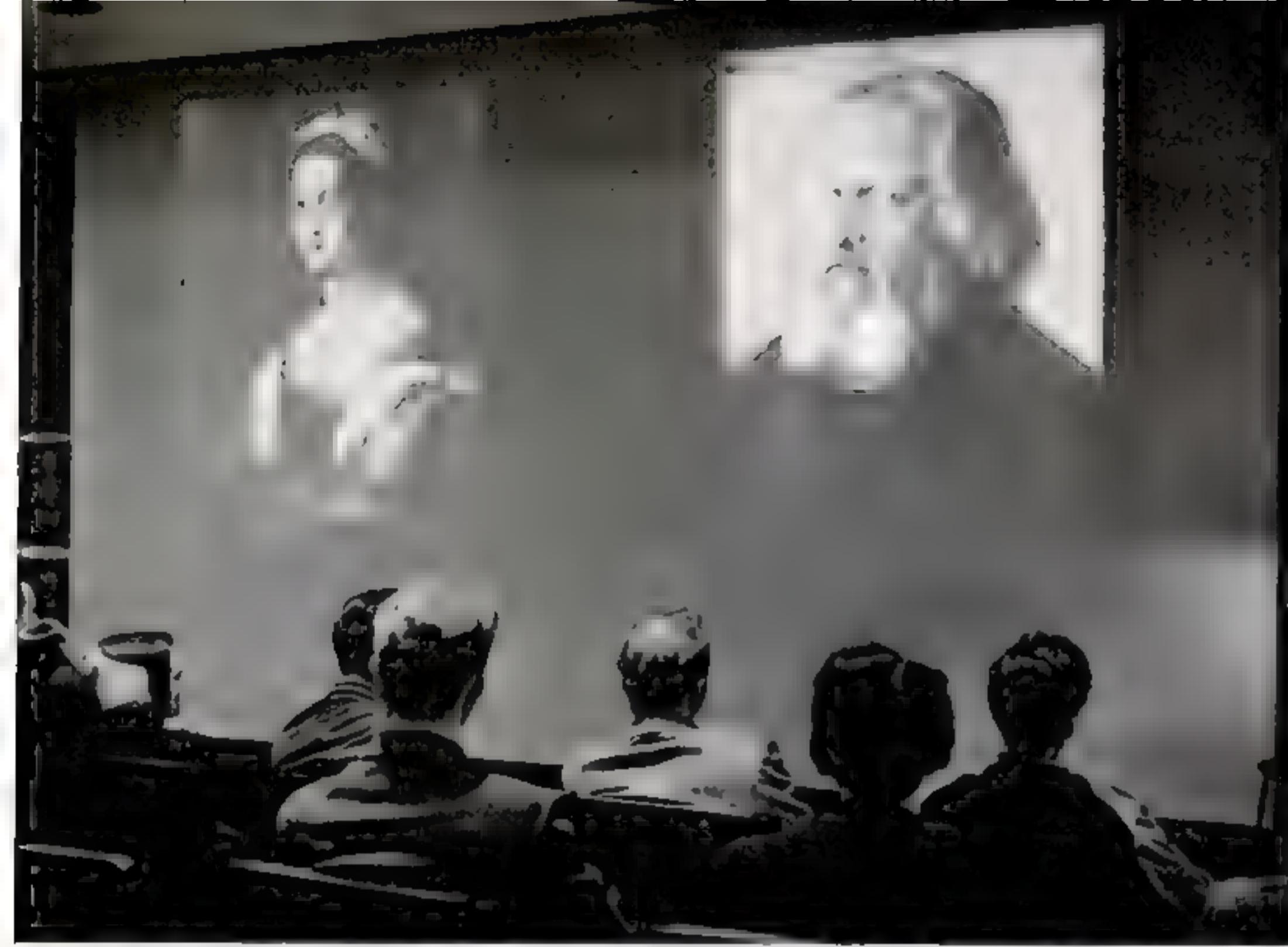
There is a great American boom starting. It is a boom in the arts and its cradle is the Valley—the Mississippi Valley, a thousand miles deep from Minnesota to New Orleans and 1,500 miles wide from Pittsburgh to Yellowstone—the greatest, most productive stretch of unbroken green in the world. The

Valley is East and West, North and South. It is the home of the real American culture, the land that made Stephen Vincent Benét write

*They tried to fit you with an English song  
And clip your speech into the English tale,  
But, even from the first, the words went wrong  
The catbird pecked away the nightingale...  
And Thames and all the rivers of the kings  
Ran into Mississippi and were drowned.*

America borrowed its political system from Europe and its industry grew on the Atlantic seaboard. But its arts—painting and sculpture and literature and music—these are just beginning to flower and they are flowering in the Valley. Already there are Mark Twain and Dreiser and Lewis in the novel, Sandburg and Masters in poetry, Wood and Curry and Benton in painting. These are just the budding.

If you seek the foremost center of the artistic ground swell in the Valley you will find it at the School of Fine Arts of the University of Iowa. Barely 10 years old, this is the only such school in the country with a complete advanced program in the creative arts. Dr. Carl E. Seashore started it. The Rockefeller and Carnegie foundations helped pay for it. Dean George D. Stoddard is ably developing it. The school is built on the idea that students, especially in the arts, should learn by doing. At old-line Fine Arts schools like Yale's the idea is for a student to study the history and theory of painting and then, if he wants to, go and paint. Most such students never paint at all. At Iowa they start right in painting (or sculpturing or writing or composing) and study the history along with their work. There is a resident artist, Grant Wood, to inspire and coach them. A good painting will count as a thesis for a Master's degree or even a Ph.D.



Art is studied at Iowa in a specially designed new building with a screen for projecting color slices of paintings. Since

there are no great museums nearby, the University keeps thousands of slides on hand. Its frequent exhibitions



A prize student is Richard Gates, 22, now working on a mural of *The History of Science* which will be hung in the Physics Building. It serves as his "thesis" for a Master's

degree. Gates painted another mural on commission for the Harlan, Iowa, postoffice. Students have won commissions in several competitions open to professional artists.

SCULPTURING AN ALABASTER BEAR



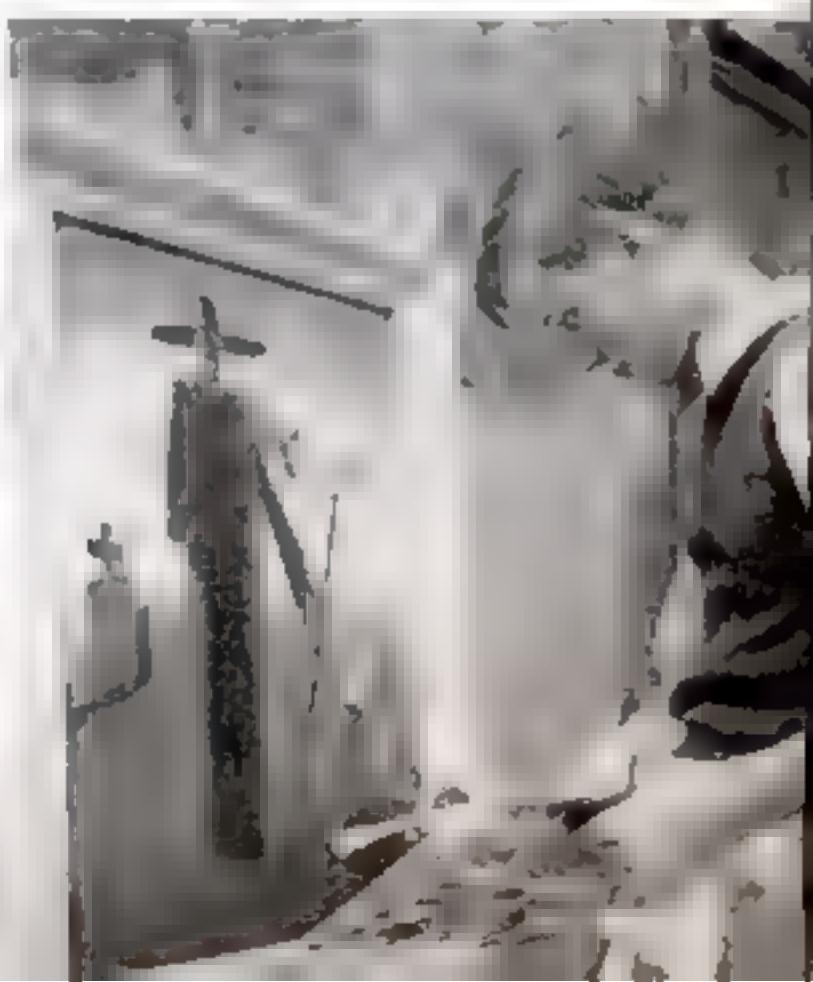
WOOD POINTS OUT FAULTS IN PAINTING



STUDENTS DISCUSS A THESIS PAINTING



FRESHMAN PAINTING A VODOO MAN





**Grant Wood gives some pointers** to one of his student-painters, Martha Stubblefield of Rochester, N. Y. As "resilient painter," Wood has his own studio. He is there

primarily to paint, serving as sort of a working model and inspiration to students, but he also conducts classes. Critics sometimes say he will turn out "a lot of little Grant

Woods" but actually his more talented students develop their own styles. Iowa student painting is "regional" only in that Wood urges them to paint things they know.

MONICA HAYS SKETCHES A MODEL



MARIAN CAPWELL, A JUNIOR, IN LIFE CLASS



MARTHA STUBBLEFIELD CARVES IN WOOD



DOROTHY WESTABY HAS A FELLOWSHIP



# IOWA'S STUDENTS WRITE NOVELS, ACT IN PLAYS



STUDENTS' BOOKS

The people who settled Iowa were first the New Englanders. They came in covered wagons, bringing their intellectual baggage with them—Bibles, Shakespeares and schoolbooks. Later came the European immigrants—Germans and Scandinavians, eager

for learning. As soon as the sod was turned, a college sprang up in almost every county seat. Today there are twelve good colleges in the State. Eastern Iowa is a sort of New England, with Iowa City its Cambridge.

But the kind of education is different. At Harvard the output of graduate students in literature would be a stack of themes with titles like "The Middle Period of Wordsworth." Iowa feels prouder of four books published by last year's students (inset). Iowa's creative writing division runs on the same principle as its graphic arts division. It has a resident poet, Paul Engle, whose career was very like Grant Wood's—birth in Iowa, a stay abroad (where he mixed with the effete Oxford poets), then a return to Iowa and overalls.

The purpose of the graduate school is to turn out teachers for the regional schools and colleges. But Iowa feels that if a boy can paint or write he will make a better teacher of painting or writing. The students and the students' students will create the art and the literature of the Valley.

Emerson, proudest blossom in the Flowering of New England, called people of the West "rough, grizzly Esaus, full of dirty strength." He thought their culture must come from New England. Esau's grandsons are the surprise of Jacob's descendants. They got the Valley. From muck lands of Indiana to Kansas, where the sun is silvered by the immemorial dust storms, North to the Dakotas and South to the gulf, the Valley is budding with an art and literature that is native American. Give it 20 years and the Flowering of the Valley may be the cultural wonder of the world.



A writing class meets informally on the huge lawn in front of the Old Capitol. When the State capital of Iowa was moved to Des Moines, this handsome Classic building be-

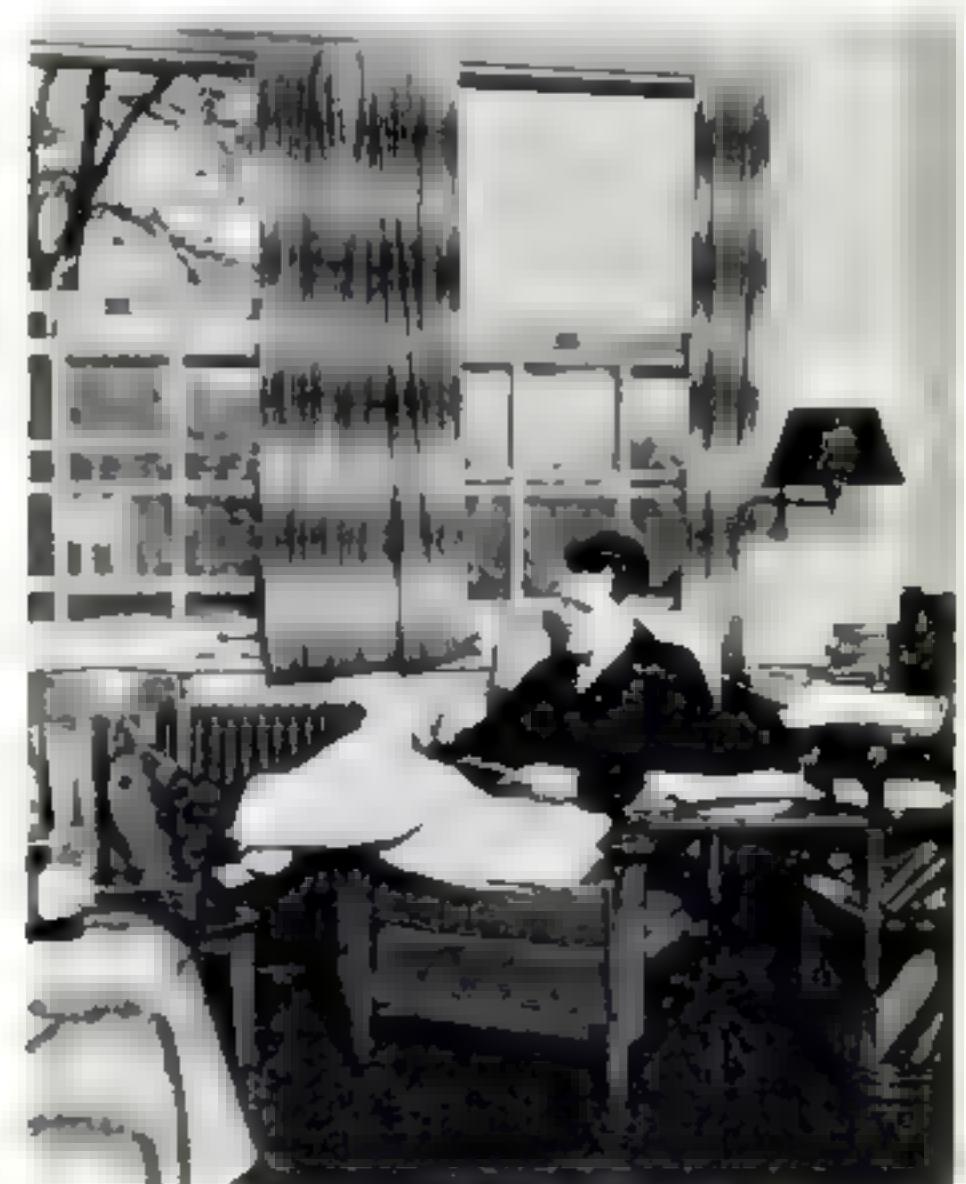
came the center of the university. Young Professor Wilbur Schramm, who is conducting this class, estimates that 25 novels are in preparation in and about Iowa City.



Writer and painter both is Verlin Cassill, 19, who has a studio over a store. Though he has sold several paintings, Cassill has decided to take his Master's in writing.



The resident poet, Paul Engle, his wife and Grant Wood's secretary picnic on the steps of the Engles' home. Engle has just published a long poem, *Corn* (Doubleday, Doran, \$2).



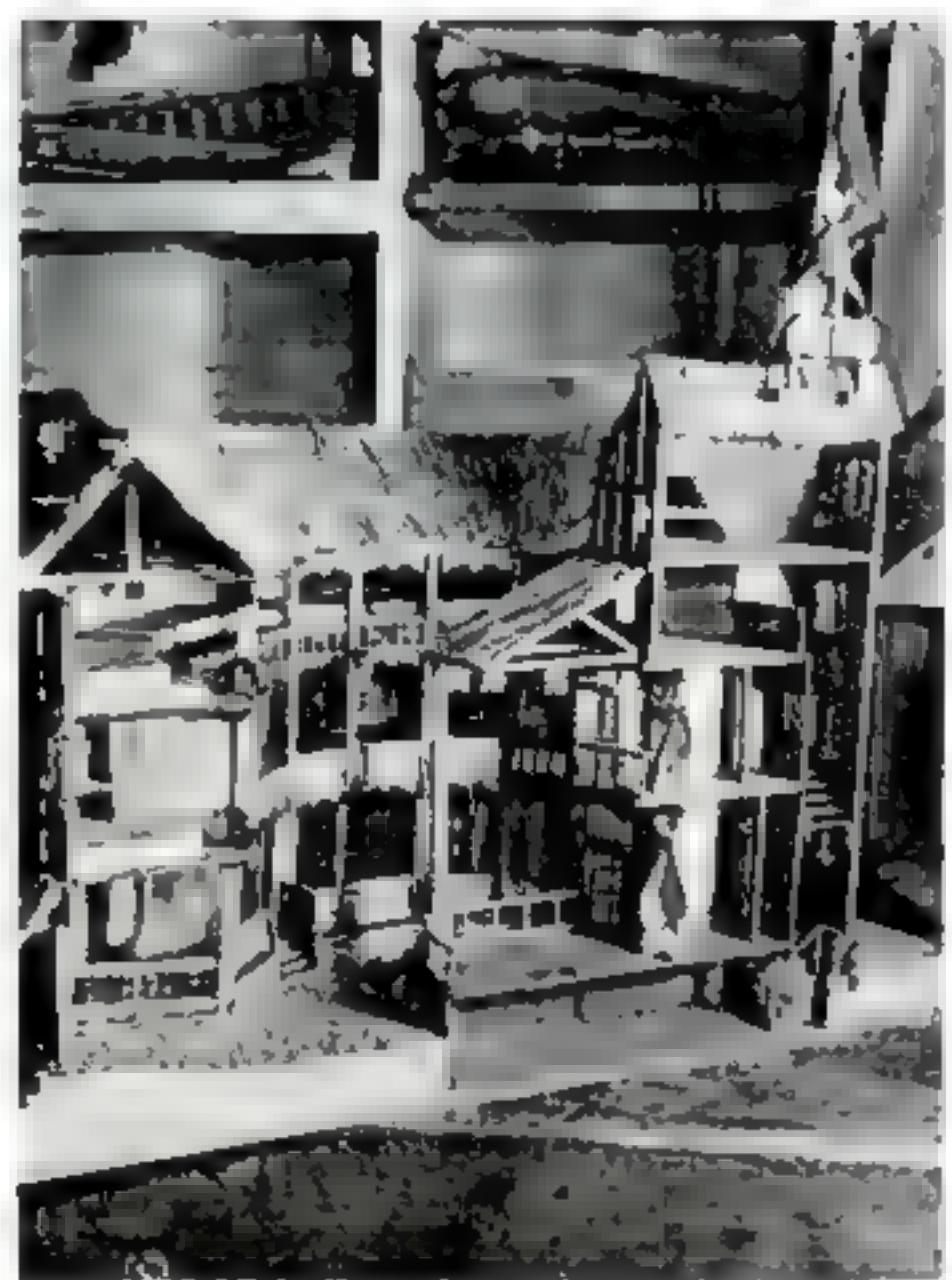
A student novelist, Jack Yeaman Bryan, works on a novel for his Ph.D. thesis. A teacher at the University of Maryland, Bryan has published in *Atlantic Monthly* and *Story*.



In the workshop of the theater, students build sets. "Stagecraft" is a fundamental course in the dramatic department.



On the "light bridge" students experiment with lighting effects. One boy is getting an M.A. for his work in lighting.



Shakespeare's Globe Theater in replica, built to scale out of straw, wire and plywood, also helped earn an M.A. degree.



A student dramatist, Thomas Pawley, of Petersburg, Va., plays the lead in his own one-act play, *Smoky*. Student playwrights have their plays produced in the new University theater, equal of Broadway playhouses. Other students do the acting, designing, directing.



For her Master's thesis, Dorothea Carlson of Battle Creek, plays the title role in Shaw's *St. Joan*. The school has turned up several talented actors and actresses, but instead of going to Broadway they seem to prefer careers as actor-managers of community theaters.

CONTINUED ON NEXT PAGE



## An Iowa farm boy practices Liszt at his own front door

**B**ill Mcardon's great-grandmother drove an oxen boat across the Mississippi in 1838, with a rifle under her knees. His father was a farmer, one of the richest soi in the world. Bill himself is a sophomore in the University's School of Fine Arts majoring in music. Here on the front porch of the family

farmhouse near Iowa City, he is practicing Liszt's *Faust Symphony* on the double bass. Besides playing the double bass in the University orchestra and the concert band, University and he has known an appreciative audience. Bill Mcardon and his Orchestra—which travels around Iowa in a trailer

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James Snyder

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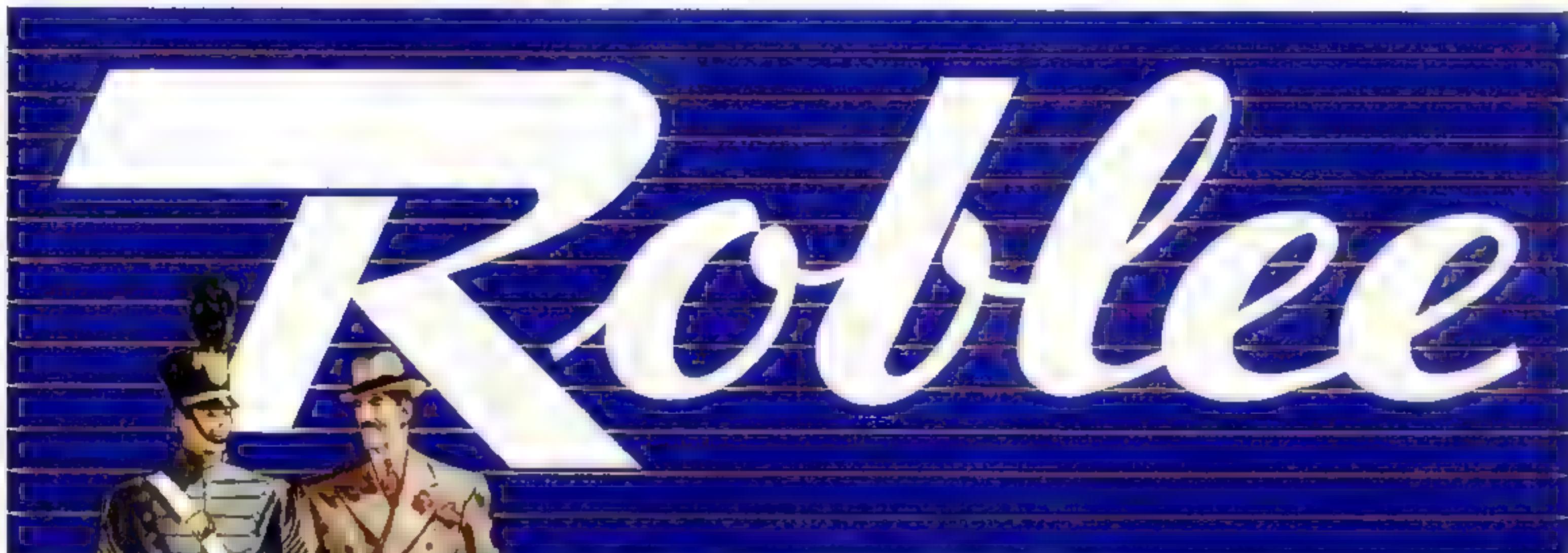
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Walk like a West Pointer in shoes with the exclusive Tread Straight feature that makes you want to walk that way—feel taller too!

Lots of men said we had something when we built our exclusive Tread Straight feature into shoes at higher prices.

Now you get it for as low as \$5!—It's one of the features of the new Roblee Shoes for Men. We think it makes this new name in shoes the biggest dollar's worth in any shoe store today. **Tread Straight Won't Grow New Feet.** It should make old feet feel better. Help you walk with toes straight ahead as Nature intended. Like a West Pointer. Even feel a half-inch taller. Special steel shank along outside edge of shoe, plus new type heel, does it.

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Get Roblees where you see the bright red-and-blue Roblee sign. Made by United Men's Division BROWN SHOE COMPANY St. Louis.

\$5.00 \$6.50  
\$5.70

Some special materials slightly higher



# THE FARMERS OF THE FUTURE WILL HAVE SMALLER FARMS, BETTER CROPS

Science changed the farm of yesterday into the farm of today by mechanizing it. The modern farmer uses tractors and trucks which a dexterous American technology has given him. His farm is therefore bigger.

Science is again changing the farm. The change is not mechanical but chemical and biological. The result will probably be to make the farm of the future smaller.

Agrobiology is the name given to this biochemical study of farm problems. The agrobiologist's aim is to grow a bigger yield on a smaller area, i.e., intensive farming. He studies the breeding and feeding of plants. On the next page a brilliant feat of alfalfa breeding is shown. The 10-ft. high tomato plant at the right is a leafy monument to an agrobiologist's feeding achievements. This plant grows in a pot packed with sterile sand. Its food, a chemical fluid, is piped from the inverted jar beside it. On this food the tomatoes grow just as big and red and tasty as out in the fields but more abundantly.

Agrobiology is founded on a dynamic concept of "soil." Soil is not just dirt. Dirt itself is inert, lifeless. Soil is dirt plus water, air, chemicals, bacteria. It teems with life. In this compound the plant must find its food. The agrobiologist, knowing what plants need and what a soil lacks, can make up the deficiencies. Though farmers are the largest group of practitioners of science, they still do not know all the agrobiologist can tell them. But they are learning.

All over the country the agrobiologist is at work. In New Brunswick, N.J., he feeds cabbages and carrots. In Manhattan, Kan., he breeds a harder wheat. In Ames, Iowa, he produces a meatier hybrid corn. Medicine for plants is more advanced than for humans. Plant pathologists know more about crown gall than doctors know about cancer. Going beyond temporary cures, like insecticides, agrobiologists are breeding diseases permanently out of plants.

Because of this, the agrobiologist can make the farmer sure of growing bigger crops, of better quality, on less ground with less work. Aware of short-range fears of over-production, his immediate aim is to increase quality, not quantity. But solving the farmer's production problem will not solve his economic problems. Here the agrobiologist can be of help. By perfecting crops like soybeans, which industry uses to make plastics, he may open industrial markets which the farmer today cannot properly exploit.



Breeding peach trees (above) at New Jersey Experiment Station is done by artificial pollination. Cheesecloth tent excludes insect pollen-carriers.



Feeding tomato plants at New Jersey results in the 10-ft. monster at right. Controlled feeding of complete chemical diet brings wonderful fruit.

CONTINUED ON NEXT PAGE

## FARM OF FUTURE

(continued)



**Baldness in beans** is studied in New Jersey. A bald-headed bean plant has no leaves, no pods. It suffers from malnutrition. These just-popped lima beans are grown in sand, which provides no food. They are then given controlled diets to discover what prevents baldness.



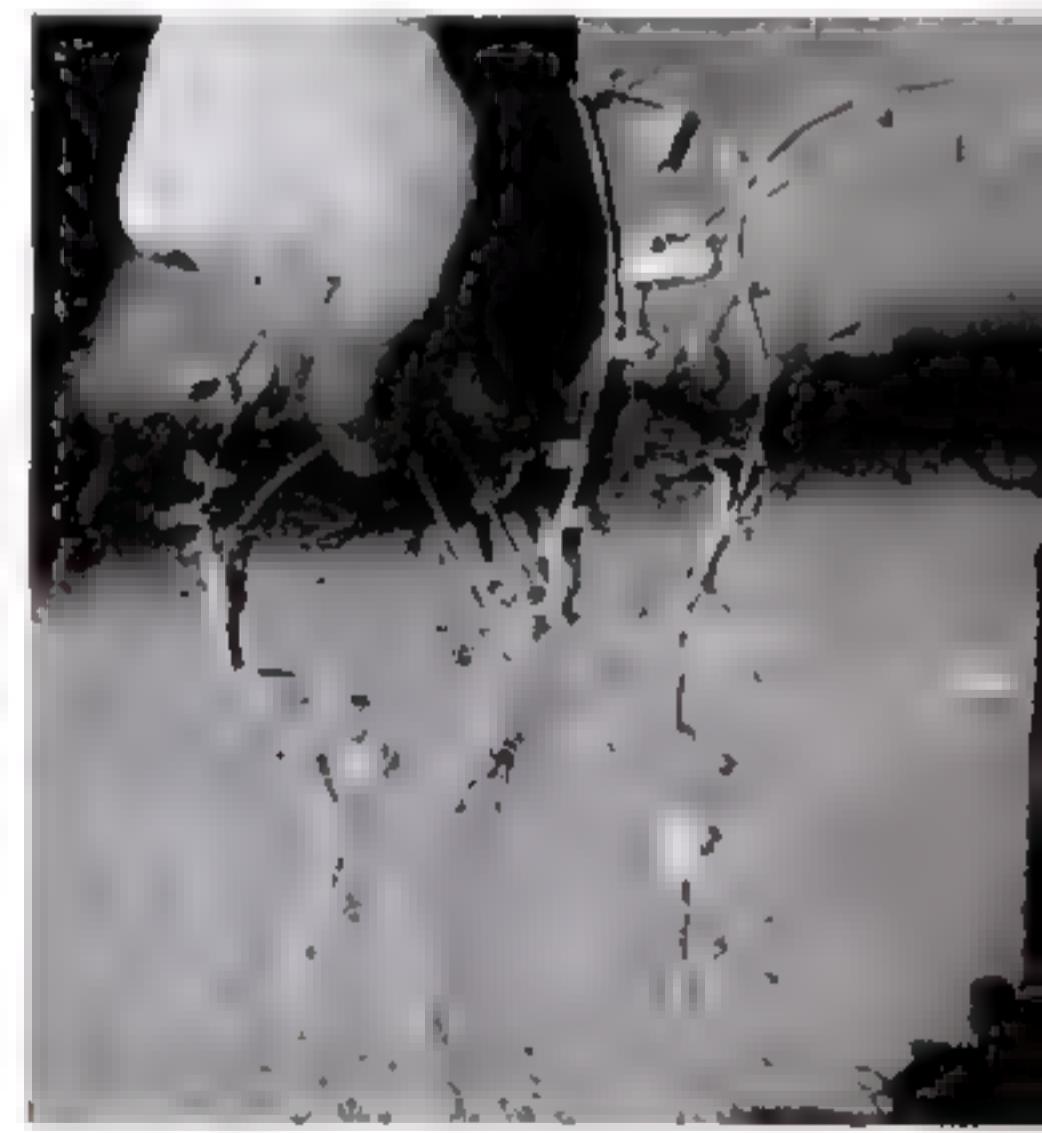
**Deficient cabbages** are grown to aid the diagnosis of cabbage sickness. The skimpy plants above, variously deprived of potassium, nitrogen, phosphorus, calcium, other mineral foods, display different symptoms. The healthy one in foreground has been fed everything.

## FUTURE ALFALFA IS BRED AT WISCONSIN

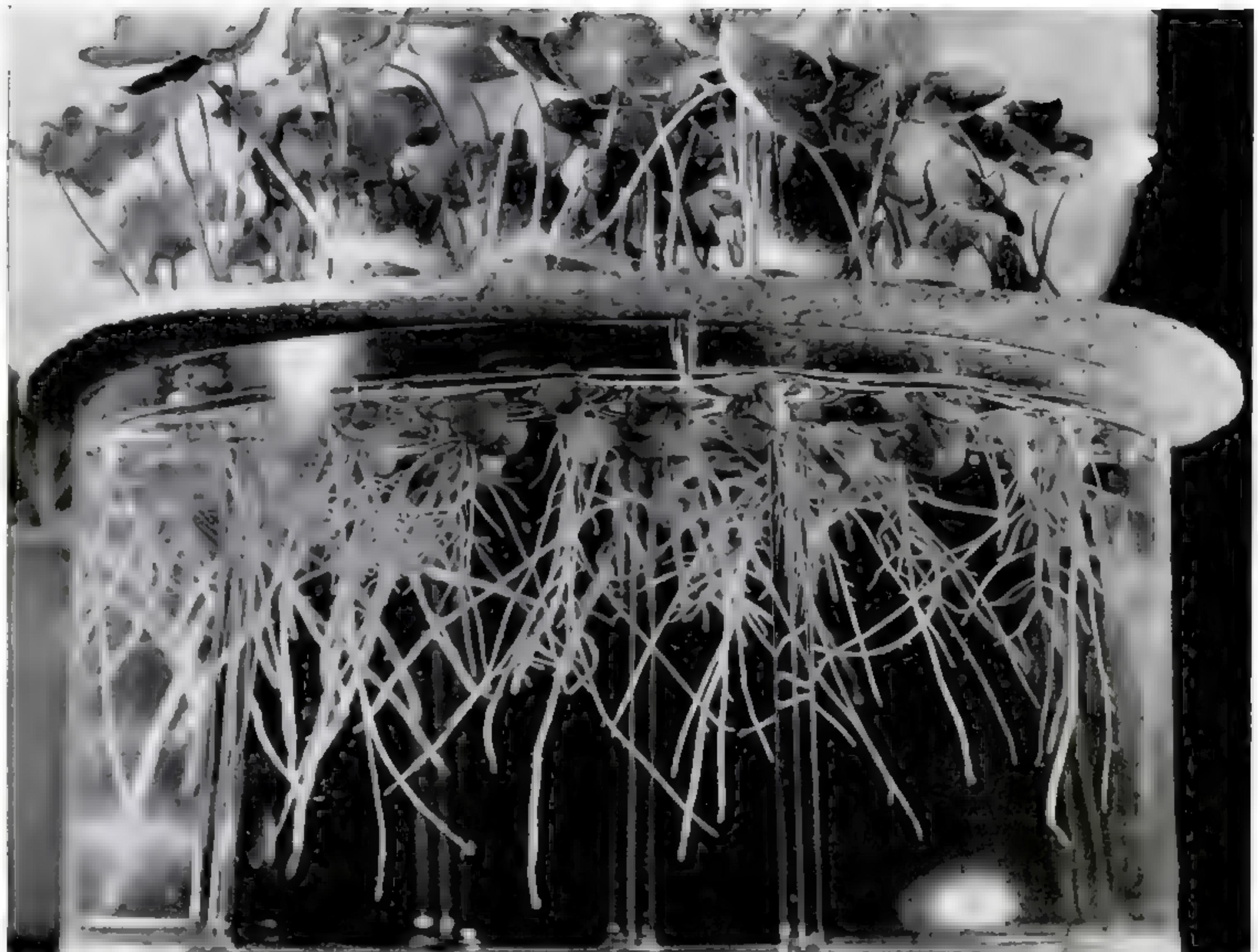
To U. S. farmers, alfalfa has a two-fold importance. Because it takes free nitrogen from the air and fixes it in soil, it furnishes plant food for later crops. Even more important is the new use of alfalfa as silage, on which livestock live in winter. The improvement of silage is one of the great tasks of agrobiologists. Alfalfa must be bred closely for climate, must be continually bred and bred again for resistance to new diseases. At the University of Wisconsin, U. S. Department of Agriculture and University scientists are developing alfalfas which resist both disease and winter. For it, they have developed bacteria which stimulate the function of nitrogen nodules. Thus the farmer of the immediate future will get better yield both from his land and from his cows.



Alfalfa plants are fed in a Wisconsin greenhouse. Sealed in bottles, their reaction to soils and bacteria is charted.



Nitrogen Nodules are examined to see result of bacterial treating. Nodules high on roots like these function best.



**Hydroponics** or aquaculture is the method illustrated above. Both words mean the growing of plants in water and chemicals rather than in earth. An exaggerated idea of the value of hydroponics has spread. Predictions have been made that farmers will plant seeds in

chemically treated water, harvest monstrous crops. But the farm of the future will not be a tank. The vital use of hydroponics is in an agrobiologist's laboratory and greenhouse. Here, by means of hydroponics, the lack of boron in nasturtium's food is studied.



**Nodule-forming bacteria** are furnished the farmer to mix in with his alfalfa seed. They stimulate nitrogen-fixing.



**Hybridizing alfalfa** is done by artificial pollination. Here flower petals are cut away so that the pollen is accessible.



**Breeds are tested** in an open field. Argentine alfalfa (light patch) was winter-killed. Cossack (dark patch) survived.

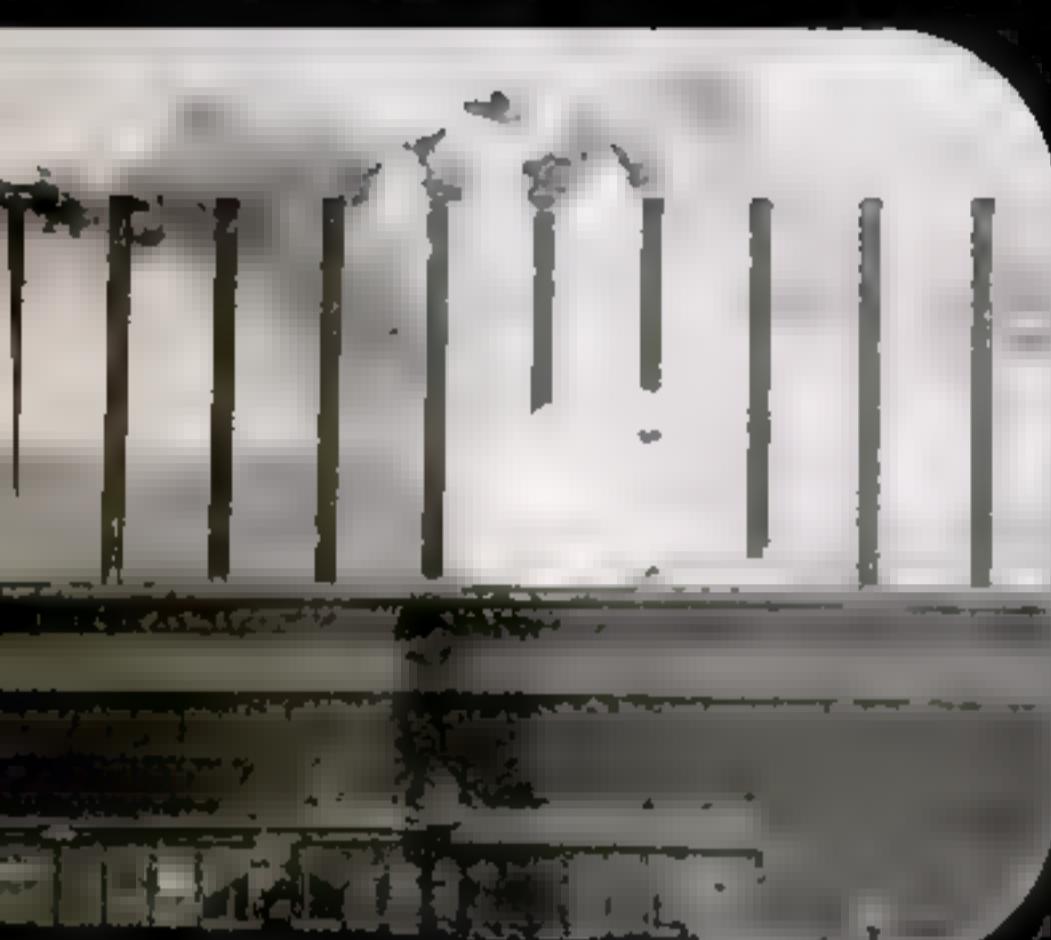
# The City

Fine new documentary film shows  
evolution of U. S. urban living

Developed for a generation as a medium of purely escapist entertainment, U. S. movies in the last decade have made impressive headway in a new direction—the documentary film. Started in 1935, the *March of Time* newsreel not only exemplified a new, important way of treating news in films but also influenced and improved other newsreels. In 1936, Pare Lorentz' famed *The Plow That Broke the Plains* was the first of a series of purely factual feature films which again demonstrated that movie audiences find well-presented fact just as exciting as well-presented fiction. In the past two years, documentary films like Joris Ivens' *The Spanish Earth* and *The 400,000,000*, Herbert Kline's *Crisis*, Lorentz' *The River* have further brilliantly proved the possibilities of movies as a medium of reportage. The documentary film is now a recognized and increasingly popular entertainment item in movie houses all over the U. S.

One of the main events at the New York World's

Fair last week was the premiere of *The City*, a first-rate documentary film which, in four forceful reels, traces the evolution and suggests the future possibilities of American urban life. Outlined by Pare Lorentz and produced by Oscar Serlin on a \$50,000 grant from the Carnegie Corporation, *The City* starts with a short survey of life in an old New England village. It then proceeds to examine unsavory examples of what U. S. cities have become, ends with an optimistic glance at the town or city of the future. Most of the examples of what the city should not be are views of New York, Pittsburgh and their surrounding terrain. Examples of what the city may become are Greenbelt, Md., and Radburn, N. J. Photographed by Willard Van Dyke and Ralph Steiner, with a graphic running commentary written by Critic Lewis Mumford, *The City* has a true and important theme: that American cities can become exactly what Americans of the future wish to make them.



4 IRON AND STEEL MILLS BEGAN TO SPOUT SMOKE



5 AND WORKMEN LIVED IN HOLES NEAR THEIR WORK



6 IN NEW YORK, BOUNDED BY RIVERS AND MARSHES



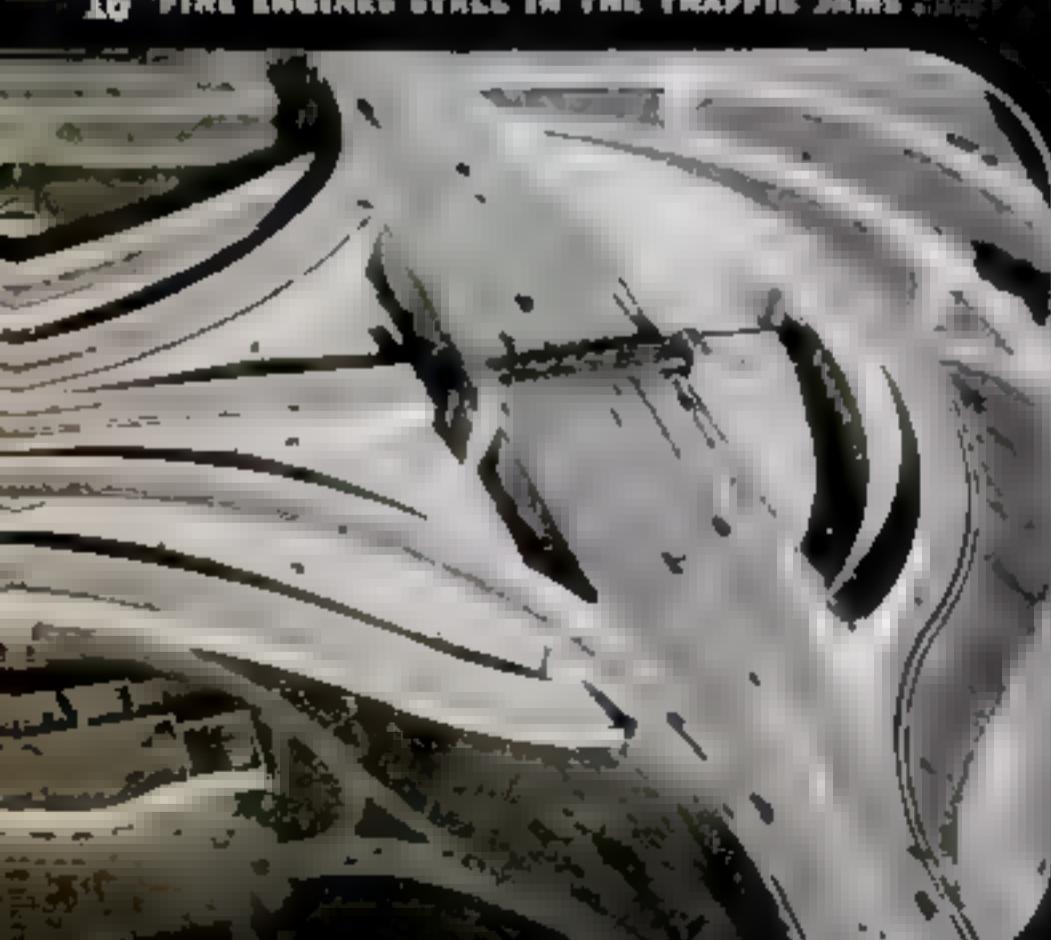
10 FIRE ENGINES STALL IN THE TRAFFIC JAMS



11 PEDESTRIANS SCRAMBLE BETWEEN BUMPER TO BUMPER



12 WHILE POLICEMEN WAVE AND WHISTLE



16 ALREADY, SMOOTH NEW PARKWAYS



17 AND TOWNS TOO SMALL FOR TRAFFIC JAMS



18 GIVE CHILDREN A CHANCE TO PLAY IN SAFETY



1 VILLAGE LIFE CENTERED AT THE CHURCH

2 A WATERWHEEL GROUNDS CORN AND SAWED WOOD WHILE

3 ONLY THE BLACKSMITH WORKED WITH IRON



7 HUNDREDS OF GIRLS WORK IN ROOMS LIKE THIS

8 SLUM CHILDREN SEARCH GUTTERS FOR FUN AND

9 AND GROW UP TO STEAL RIDES ON TRUCKS



13 ON SUNDAY MORNING, WALL STREET IS EMPTY

14 BUT THE ROADS LEADING OUT OF TOWN ARE FULL

15 AND JOY RIDERS CURSE EACH OTHER



19 CLEAN FACTORIES ARE BUILT ON LAWNS

20 WITH SUNNY TOWNS NEARBY IN WHICH FAMILIES

21 CAN GROW UP TO DEAL WITH FUTURE PROBLEMS



"I always kept 'em together and kept 'em fed. I planned for 'em. I can buy this house for ten dollars. I'll have a garden

along there. Ducks can swim in the irrigation ditch. I got to get ten dollars."

"We just got in. Gonna work on the pear. Got a han'bill that says they's good wages pickin' pears."



"The whole thing's nuts. There's work to do and people to do it, but them two can't get together. There's food to eat and people to eat it, and them two can't get together neither."

## "THE GRAPES OF WRATH"

John Steinbeck writes a major  
novel about Western migrants



"We got to have a house when the rains come — just' so's its got





"Lettuce crates fell on my head. They give us fourteen dollars compensation. I'm the lucky one. I'm gonna die pretty soon now. I wish he didn't feel so bad about it."



"The company lets us live in 'em when we're pickin' cotton. When we ain't workin', we pay rent. Water's comm' up in 'em now."



"It's the kids. . . . A man can get hungry and it ain't so bad. A man gets sick when the kids are hungry."

In 1934, when the rest of the U.S. began to rise out of Depression, dust began to blow in Oklahoma and Montana, Arkansas and the Dakotas. Thousands of bewildered farmers and farm hands lost their holdings or their jobs and began to drift West. By the time the dust stopped blowing, the banks and the land companies found that mechanized farming over huge areas could make the land pay when individual farmers could not. The drift Westward continued and grew. Lured by assurances of green land and good money, the farmers sold their old tools and older houses, their livestock and furniture for anything they would bring. They used the money to buy shaky old cars, sawing off the bodies to make sedans into flimsy trucks. Along Route 66, through the Texas Panhandle, New Mexico and Arizona, they squeaked and rattled by tens of thousands, a bedraggled leaderless horde, camping beside the creeks and prairie villages, headed for California as a promised land.

In California the migrants found no promised land. Instead, they found that thousands of their own kind

had already glutted the market for cheap itinerant labor. Furthermore, scrabbling about the State to look for work, fighting each other for jobs, they learned that California hated them because they were hungry and desperate. Because most of them came from Oklahoma, they were scornfully called "Okies," harried along between scarce jobs. Migrants are still in California, squatting in hideous poverty and squalor on the thin margins of the world's richest land. Of the one-third of a nation which is ill-housed, ill-clad, ill-nourished these are the bitterest dregs.

The problem of the Okies, though grim, is not insoluble. Some hope of a solution is suggested by the fact that an American writer can not only write about the Okies but that the result can be hailed by U.S. critics as the book of the decade. In *The Grapes of Wrath* (The Viking Press, \$2.75), John Steinbeck (*Of Mice and Men*) presents the Okies in all their stink and misery, their courage and confusion. His 600-page novel, which may become a 20th Century *Uncle Tom's Cabin*, is now a nationwide best-seller. Last

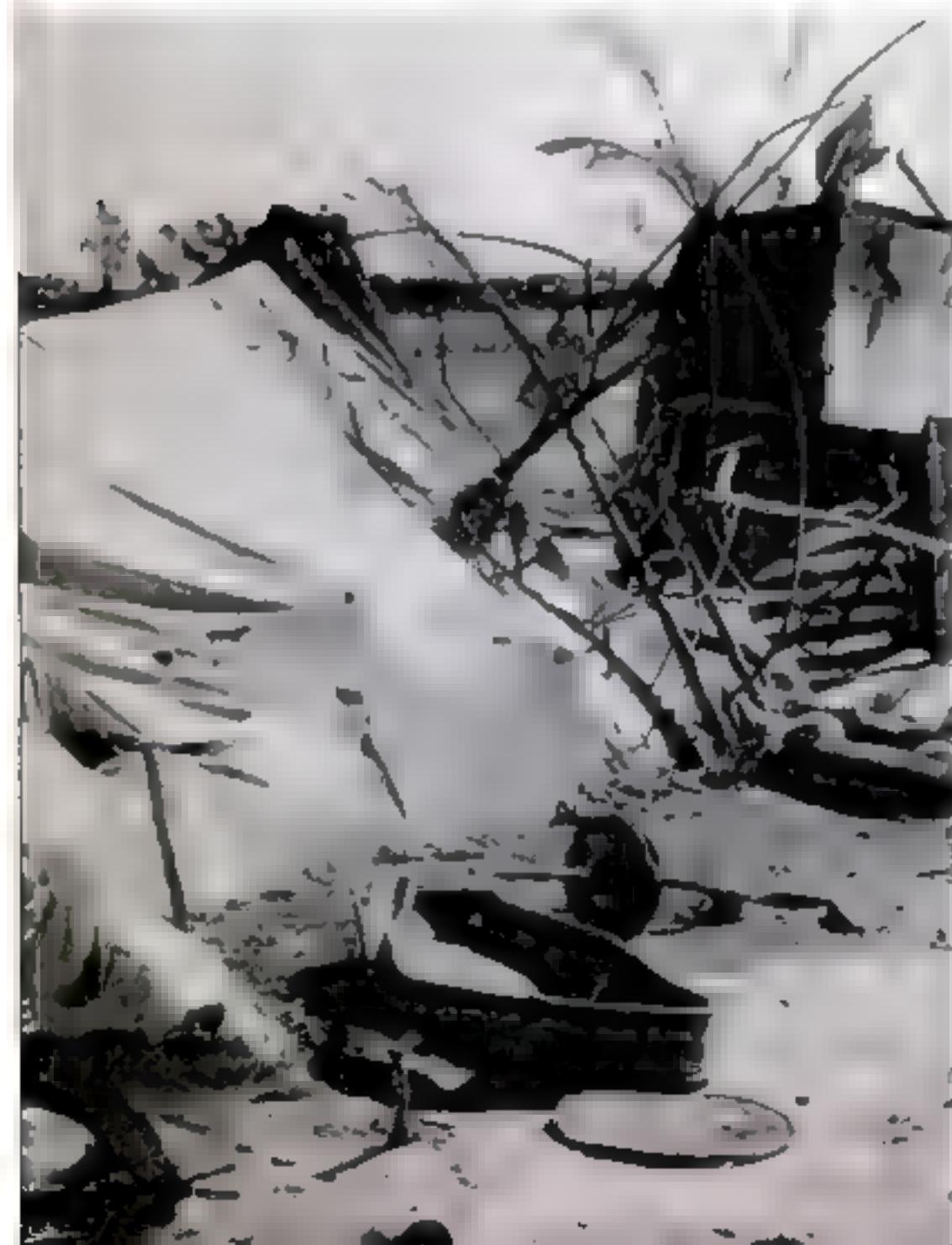
week, Producer Darryl Zanuck paid \$75,000 for the right to make it into a movie.

The pictures on this page are not simply types which resemble those described in *The Grapes of Wrath*. They are the people of whom Author Steinbeck wrote. Before starting his book, he lived in California's migratory labor camps. LIFE Photographer Horace Bristol accompanied him. The woman on the left-hand page might well be Ma Joad, Author Steinbeck's heroine. The man with the double-bladed ax is a counterpart of his hero, Tom Joad. Captions for their pictures and all others on these pages were written by Steinbeck. Some are excerpts from his book. Others were written especially for LIFE's photographs.



AUTHOR JOHN STEINBECK

"a roof and a floor. Just to keep the little fellas off'n the ground!"



"She's awful pretty. An' she been to high school. She could help a man with figuring and stuff like that."



## Bewitching Debs prepare for dates with a Woodbury Facial Cocktail



MISS *Gloria Armstrong*

"...lovely New York debutante...lifts precious pale and raises rosy blushes. The secret of her fair complexion is constant care with Woodbury Facial Soap." —*Z. e de Sade*

Says CHOLLY KNICKERBOCKER  
*Noted Society Commentator*

"I've often noticed that tender attachments thrive best after 5 P. M. The new popular vogue among the debs, the Woodbury Facial Cocktail, may account for it. A Skin You Love to Touch will ever be the short cut to romance."

Tonight make your Complexion beam with loveliness. Take this Beauty Cocktail with Woodbury.

First rule in the debutantes' textbook on Glamour... "Take a Woodbury Facial Cocktail every afternoon at five"! So when a busy day leaves your complexion muddy and uninviting, whisk up a rich pearly lather of fragrant Woodbury Facial Soap. Soak your face a full minute or more to arouse your weary skin.

Since the days of bustles and leg-o'-mutton sleeves, Woodbury Facial Soap has encouraged skin beauty. Let Woodbury bring you, too, a lovely complexion! Costly unguents and a

skin-invigorating Vitamin distinguish Woodbury from ordinary soaps. This important Vitamin aids the skin's vitality... helps it to fresh vigor.

Get Woodbury now. Take a refreshing Facial Cocktail tonight, and make some man's heart beat faster.



CONTAINS SKIN-INVIGORATING VITAMIN\*  
\*Produced by ultra-violet irradiation—Pat. No. 1676579

## NEW NYLON STOCKINGS MAY RUIN JAPAN'S SILK TRADE

Du Pont makes yarn of coal, air and water

Every morning for the past five weeks Eileen Leonard has gone to work in the du Pont exhibit at the New York World's Fair wearing the same pair of stockings. Her stockings have neither runs nor darns. They are cobwebby sheer, trim at the ankle, supple at the knee. The longer they wear, the greater is the worry of bankers and merchants dealing in Japanese currency and Japanese silk. Eileen's stockings, which look like silk, are made from coal, air and water.

The silk industry, which for the past ten years has been waging a losing battle with rayon in the fabric field, has never considered rayon a serious threat in the women's stocking field. As a stocking yarn, rayon has competed with cotton. Silk has held its supremacy in the quality market because silk was the only fiber that combined sheerness with great elasticity. Now, after years of research, the du Pont Company has perfected a synthetic yarn called nylon, which looks like a sure thing to supplant silk for stockings.

Nylon stockings are now being worn by du Pont employees and executives' wives. None is for sale, but at year's end they may be put on the market at from \$1.10 to \$1.50 a pair, depending on their sheerness. To U.S. stocking manufacturers nylon is not a menace, as they can readily adjust their machinery to the new fiber. To Japan, whose raw-silk exports to the U. S. in 1938 amounted to \$89,651,000 or about 66% of its total exports to the U. S., nylon is the white devil which may eventually destroy its greatest industry.



Prize exhibits at Fair's Wonder World of Chemistry are these nylon stockings worn by Katharine Mitten and Eileen Leonard. They have withstood almost 400 hours.



Great strength of nylon fiber is demonstrated above by Eileen Leonard. Nylon absorbs little moisture and has virtually the same strength when wet as when dry.



Cobwebby sheer, nylon looks like silk but it has a slightly metallic feel. Although nylon stockings are more resistant to runs, they go faster when once started.

**Revolutionary...**

## **NEW MEASURING DEVICE ASSURES FIT PRECISION**

Here's a brand new idea in slip service that creates an actual pattern for your own individual figure type! Here's perfection of fit that only a custom dressmaker could duplicate. You'll marvel at its slimming effect as well as freedom-in-action and comfort such as you've never believed possible!

Only Corette CUSTOMOLD® Slips are fitted by that amazing measuring device known as the CUSTOMETER®... backed by size variations never available before. Only such a flawlessly cut and tailored slip can eliminate twisting, sagging, bulging and riding up!

What's more, you'll appreciate their incomparable needlecraft and fastidious tailoring, in long wearing BEMBERG® rayon and silk, tested for washability and wearing qualities. Cut on a true 45 degree angle of alternating bias panels, with double strength phantom seams that will not show through your dress.

All this is yours... at no extra cost! All Corette CUSTOMOLD Slips are unconditionally guaranteed for six months. Choose from Shell Pink, White, Navy and Black.

**BEMBERG® rayon & silk \$2.00**

\*REG. U. S. PAT. OFF.



Amazing Custometer checks length, bust and hip measurements in a jiffy. No matter what your figure type, here's a slip cut to the measurements of your own form! Recent survey proves 90% of all women do not get proper slip fit... no wonder the Custometer revolutionizes the slip industry.



Most popular style is four gore bias slip, tailored by one of the country's leading makers. The price fits your budget as neatly as the slip fits your figure! Be measured by Custometer TODAY, and start looking your sash, trim best.



\*PATENT APPLIED FOR

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*Customold*  
**SLIPS**

EXCLUSIVE WITH ONE STORE IN EACH CITY

Baltimore, Md.	Holiday Brothers Co.	Nathan's, Inc.
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Cleveland, Ohio	Stern & Mann	Tepper Bros.
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Wilmington, Del.		

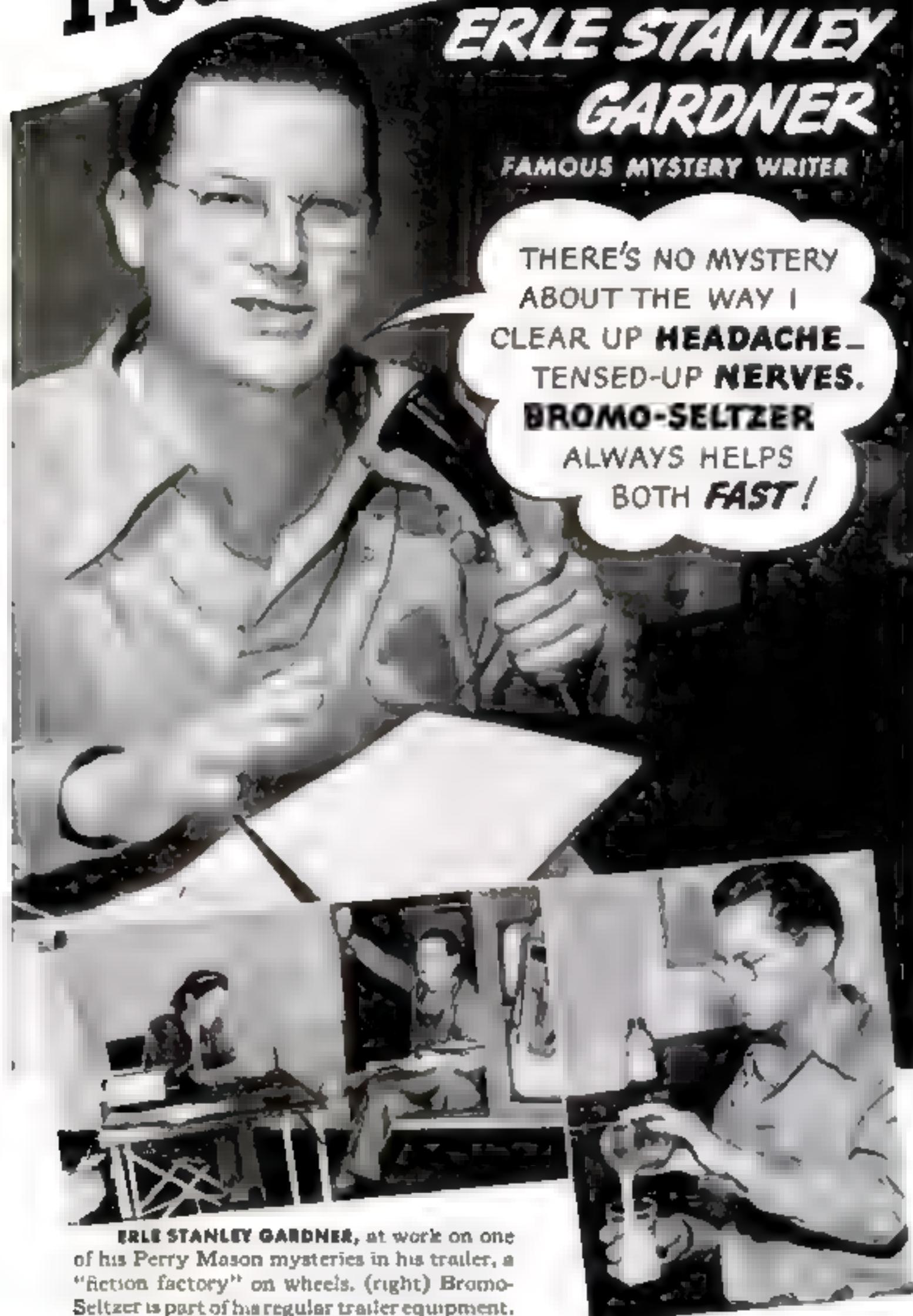
For stores in other cities, write: Custom Undergarment Corp., 1450 Broadway, N.Y.

# "The Case of the Nerve-wracking Headache" solved by

ERLE STANLEY GARDNER

FAMOUS MYSTERY WRITER

THERE'S NO MYSTERY  
ABOUT THE WAY I  
CLEAR UP HEADACHE—  
TENSED-UP NERVES.  
**BROMO-SELTZER**  
ALWAYS HELPS  
BOTH **FAST!**



ERLE STANLEY GARDNER, at work on one of his Perry Mason mysteries in his trailer, a "fiction factory" on wheels. (right) Bromo-Seltzer is part of his regular trailer equipment.

## Headache strains your Nerves

HEADACHE often strains your nervous system. It makes you nervous, irritable—makes it harder to think or concentrate. That's why headache is best treated with a remedy made to do at least 2 things . . . relieve pain fast and steady your nerves.

Bromo-Seltzer does both. Tests by a group of doctors proved this.

Millions of successful people everywhere—who can't afford to let headache slow them down—take Bromo-Seltzer.\* It eases the

pain quickly, relieves nerve strain, too. Leaves you feeling less tense and nervous—more alert!

Be sure to keep Bromo-Seltzer at home always. Buy it at drugstores—soda fountains everywhere.

\*For frequently recurring or persistent headaches, see your doctor. For ordinary headache, take Bromo-Seltzer.

Relieves,  
**HEADACHE**  
Calms your  
**NERVES**



## BROMO-SELTZER

## SPORTS

# FIRST U. S. SPORTS EVENT IS TELEVISED BY NBC

For all U. S. sports fans the picture below is a milestone. Taken at Columbia University's Baker Field on May 17, it shows the first American sports event ever to be televised. From a rickety 12-ft. platform, an NBC cameraman is "photographing" the Princeton-Columbia baseball game. Through the coding cable, which leads to an amplifier truck, go the picture impulses. On a direct line they are sent from an antenna atop a flagpole to the 85th floor of the Empire State Building. There they are re-transmitted to an estimated 5,000 spectators.

Reception that day was rather fuzzy (*lower right*). The camera was unable to follow the ball, could not bring catcher and pitcher on screen at the same time. But no fuzziness could hide what television will mean for American sports. Within ten years an audience of 10,000,000, sitting at home or in movie theaters, will see the World Series or the Rose Bowl Game. The batting style of a Joe DiMaggio or the slugging of a Joe Louis will be studied in every country barbershop and corner drugstore. Thousands of men and women who have never seen a big-time sports event will watch the moving shadows on the television screen, become excited fans. In New York, after watching the first telecast, Fight Promoter Mike Jacobs prophesied he will sell television rights to his heavyweight fights for \$1,000,000.

In England, sports television is already a reality. For two years cricket has been televised and on May 24 five big London theaters showed the famous Derby at Epsom, England's greatest sports event, from start to finish. Spectators said the image was perfect, that only the wide-angle shots were slightly blurred.



As batter cracks a single, Iconoscope camera picks up action and mike (left) picks up sound. Only 400 people watched the game at the field. Princeton won 2-1.



Game is received on 2600 set owned by Hiram C. Bloomingdale, New York. Notice the image of diamond. Guests sat in easy chairs, ate sandwiches, drank highballs.



Image of the scene shown on the opposite page was not very clear. Engineers think that they can do better with tennis, bike races and boxing, where action is compact.

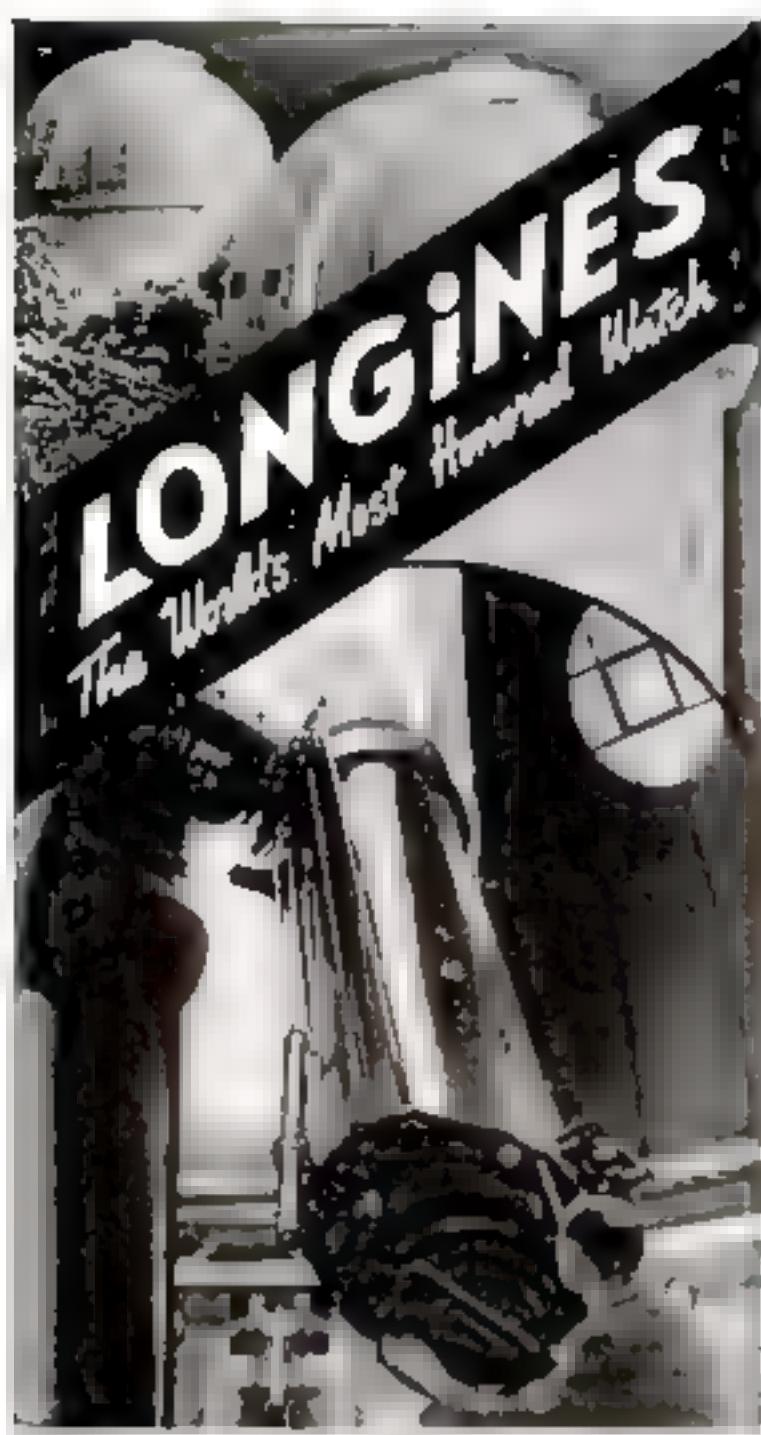


Announcer Bill Stern was slightly confused by television. Instead of breathlessly describing everything he sees, he must learn merely to interpret what camera shows.

Fair and fragrant are the blossoms from which Hawaiian lei makers fashion Hawaii's graceful tribute to visitors.



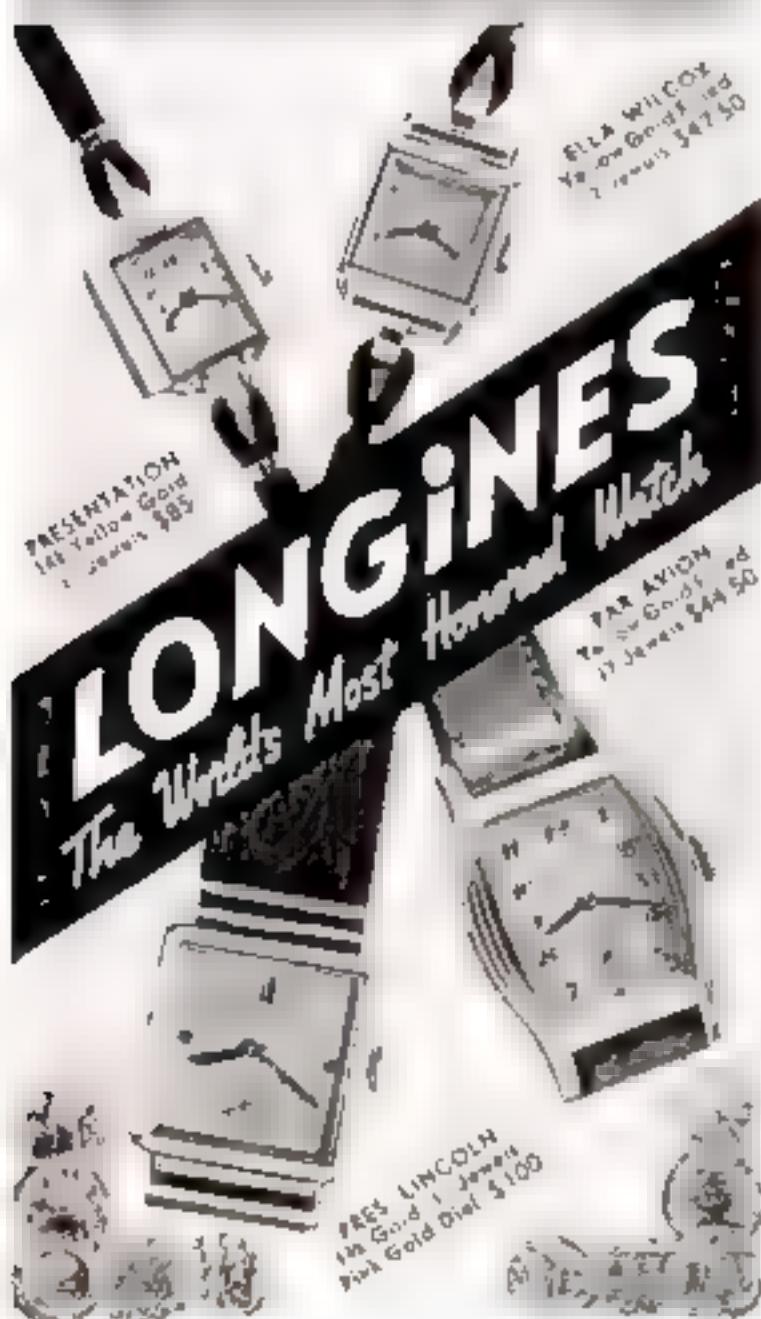
You'll think of flowers and tropic sunshine when you drink fragrant, golden Dole Pineapple Juice from Hawaii. An exciting flavor—a refreshing tang—make Dole's the favorite drink of Islanders and Mainlanders too. Rich in natural fruit-energy, and a good source of vitamins A, B and C.



*Winner of*  
**10 WORLD'S FAIR  
GRAND PRIZES . . .  
28 GOLD MEDALS**  
and  
**MORE OBSERVATORY  
ACCURACY AWARDS  
THAN ANY OTHER WATCH**

Longines Watches priced \$40 upward are sold only by Authorized Longines Jewelers.

A. H. T. WORLD'S FAIR  
Visit the great  
LONGINES - WITTNAUER  
"Time & Space" Ridge,  
exhibiting the thrilling  
spectacle, "Time and  
Space," created by the  
AMERICAN MUSEUM  
OF NATURAL HISTORY



## THE AMERICAN DESTINY (continued from page 47)

the heart of it is invulnerable and the nation can never be conquered or intimidated. Upon this continent or within easy and friendly reach of it, there is every material resource. The people who inhabit this continent selected themselves as colonists and emigrants out of the civilized nations of Europe: they are adventurous, enterprising, and brave with high faith. They are in full possession of the whole technology of modern science. They inherit an equipment of capital produced by prodigious labor and by immense investment. They have political institutions, which with all their faults in detail, are one of the wonders of the world: nowhere else and never before has so large a population lived in one union on so vast a territory with such security and in such freedom. Nothing that a people could want, nothing that nations fight to obtain, nothing that men die to achieve is lacking, nothing except a clear purpose and the confident will to make the most of all these things.

And why are they lacking? They have never been lacking before. This country has passed through many trying days. But never, in the bleak winter of Valley Forge or on the field of Gettysburg, has it lacked leaders who were confident of its destiny. What is it, then, that has happened to this people in the post-War world that has shaken their confidence? They have not been wrecked by a calamity of nature. They have not been attacked and conquered by an enemy. But for the moment they have lost the conviction that they are moving forward, that they are on their way and are going places.

They have lost their confidence, I submit, because three times in these twenty years they have started off with high hope to do great things that they had never done before, and three times, on the first attempt, they have been disappointed. First, they intervened in a world war, decided the issue, and failed to establish a good peace. Then, they intervened as the creditor to restore the world's economy, and failed. Then, they set out to give themselves a secure and abundant life at home, and they have not yet succeeded. In each movement they began with enthusiasm and they have ended in disillusionment. For the moment, they think they were deluded under Wilson when they saw themselves as the organizers of world peace, under Coolidge when they worked for reconstruction, under Roosevelt when they worked for reform.

But the American people were not deluded in what they undertook to do in the post-War era. These were the things that still have to be done. They did not succeed on the first attempts because they had not yet acquired the training or the experience that were needed in order to succeed. They were right under Wilson when they recognized that as a result of the War the power and influence of America had grown so great in the world that on the paramount issues the position of the United States, whatever it did or refused to do, was decisive. The insight was true; the execution was gravely defective. Neither Mr. Wilson nor his diplomatic assistants nor the Congress nor the people at large had learned how to exercise successfully so much influence in the outer world. The conduct of the foreign policy of a great power requires experienced men. That experience cannot be gotten in a few months or even in a few years.

The American people were right under Coolidge when they recognized that as a result of the War they had become the strongest creditor power, and that this gave them a vital interest and a clear obligation to take a leading part in the reconstruction of the money and the credit and the commerce of the world. But the American bankers and American legislators of the Twenties had had almost no experience in such affairs; American business men had not yet learned to understand the difference between the commercial policy of a debtor nation and that of a creditor nation.

And under Roosevelt the American people were right when they recognized that the time had come when the nation must organize itself to control the violence of booms and depressions, must take measures to preserve its agriculture and to restore the soil and to conserve natural resources, must guarantee to all men an opportunity to work, must provide security for the young, the old, the sick, and the handicapped. But the wisdom to do all these things was not equal to the need for doing them. Mr. Roosevelt's New Dealers were as untrained and ill-equipped to design and administer these reforms as had been Mr. Wilson's diplomats and Mr. Coolidge's financiers.

For the moment, therefore, a large part of the people have concluded that in each of these three undertakings of the post-War era the objective was wrong. They look upon the tragic consequences of Versailles as proof that it was a mistake to attempt to organize the world for peace under the reign of law. They look upon the crash of 1929 and the defaulted bonds and the wasted savings as proof that it is a mistake for the world's creditor to extend credit. They look now

## I GUESS YOU NEVER HAD FLEAS



Imagine an itch that's everywhere at once. Your skin gets sore and you wake up scratching. Maybe you get a skin disease and your hair falls out!



I had 'em till the master brought home some Sergeant's Improved SKIP-FLEA POWDER. He dusts it into my coat, and . . . boy! does it kill 'em dead! And it soothes the old itches too!



There's nothing like it — except SKIP-FLEA SOAP that does the same job and cleans too. Take it from me, SKIP-FLEA'S a treat for any dog. Get it at drug and pet stores. Ask them for your free copy of the new Sergeant's DOG BOOK (or write Sergeant's, Dept. GN-6, Richmond, Va.)

## Sergeant's DOG MEDICINES



**FREE**  
to Boys and Girls  
(and parent or guardian)  
**ALL-EXPENSE TRIPS**  
to either World's Fair  
and 108 other prizes!

Nothing to Buy! Easy to Compete!  
And — It's Fun!

Go to your bicycle store and get an Official Entry Blank. Then write 100 words or less on "Why I Want a New Departure Speed Changer on My Bicycle." Mail it before midnight, June 30th, to

## NEW DEPARTURE BRISTOL, CONNECTICUT

**WIN** AN ALL-EXPENSE TRIP (or \$500.00 cash equivalent) or one of the 108 other prizes. Remember—writing to buy! Get Official Entry Blank at your bicycle store now!



**AMMEN'S  
POWDER**  
For Skin Comfort

**FEET HURT?**  
QUICK RELIEF FOR TIRED, BURNING,  
TENDER, ITCHY, PERSPIRING FEET.  
SOFTENS CORNS AND CALLOUSES.  
AT ALL DRUGGISTS SINCE 1870.

**JOHNSON'S FOOT SOAP**  
BORAX, IODINE AND BRAN

with dismay upon the unending deficits and the millions of unemployed and the stagnation of business. These failures and disappointments have for the time being turned a substantial majority against domestic reforms, against general reconstruction, and against organized peace. They have produced the thoroughly disillusioned American of the present day who wants to withdraw within the three-mile limit, wants to bury the gold, and wants to suspend the reforms.

No doubt this reaction is human enough. But a completely reactionary state of mind is hardly suited to cope successfully with the problems of a dynamic age. On the contrary, the more we have refused to go on with the things we undertook to do, and failed to achieve, the more compelling and urgent do these tasks become. Twenty years ago the Congress refused to proceed with the difficult work of organizing the world for peace. The refusal has not settled the issue. It is more acute today than it ever was before, and never in time of peace has the United States had to arm on such a scale as it is arming today. Ten years ago we refused to go on with the task of reconstructing the shattered economy of the world. The refusal has not made easier, in fact it has aggravated, the difficulty of reconstructing our own domestic economy. Now we are at the point where a considerable number of the voters think they would like to put an end to social reforms. If these views prevail, we shall soon find that the discontent makes necessary even more drastic social reforms.

Above all we are finding that when a nation refuses to do the great things which it has to do, it is unable to do the littler things that it wishes to do. The refusal to accept the large responsibilities is demoralizing. Men who will not face the big things become generally nervous and fearful in all things. The attitude of negation, of not producing, not working, not saving, not investing, not competing, not trading, not exercising influence, is simply the morbid rationalization of the general refusal to accept the American destiny in the post-War world.

That is what ails us today. In the lifetime of the generation to which we belong there has occurred one of the greatest events in the history of mankind. The controlling power in western civilization has crossed the Atlantic. America, which was once a colony on the frontiers of Europe, is now, and will in the next generations become even more certainly, the geographic and the economic and the political center of the Occident. All the world knows this and acknowledges it. The American people have known it under Wilson, under Coolidge, under Roosevelt, in their great undertakings after the World War. They were following the American destiny. And, with all its risks, all its responsibilities, all its anxieties, after all the disappointments and failures, they will have to go on with it. There is no way to refuse this destiny.

What Rome was to the ancient world, what Great Britain has been to the modern world, America is to be to the world of tomorrow. We might wish it otherwise. I do. Every man who was young in the easier America of the pre-War world must long for it at times. But our personal preferences count for little in the great movements of history, and when the destiny of a nation is revealed to it, there is no choice but to accept that destiny and to make ready in order to be equal to it.

The indecision which paralyzes us today will not be ended by reassuring statements from the White House, or by little changes in this or that policy, or by a change of party control. The indecision which pervades the American spirit, and manifests itself in the policies of plowing under, not producing, not saving, not investing, has its root in the refusal by the American people to see themselves as they are, as a very great nation, and to act accordingly. We are negative today in all things because we have shrunk from being positive in the big things. We are undecided, nervous and torn because we are confronting the problems of the Twentieth Century with minds formed in the Nineteenth Century, and attached to the smaller duties of a simpler past. We are afraid of the fertility of the American earth, afraid of the productiveness of American capital and American labor, afraid of American influence in the family of nations, because we still cling to the mentality of a little nation on the frontiers of the civilized world, though we have the opportunity, the power, and the responsibilities of a very great nation at the center of the civilized world.

The American people will move forward again, and feel once more the exhilaration and the confidence that have made them what they are, when they allow themselves to become conscious of their greatness, conscious not only of their incomparable inheritance but of the splendor of their destiny. Then the things that seem difficult will seem easy, and the willingness to be equal to their mission will restore their confidence and make whole their will.



*TODAY—SCOTCH MINDED SPORTSMEN RELAX IN SALYNA*

Believe us, these matched ensembles are the real McGregor in comfort—not to mention casual good looks. The in-or-outter shirts are sheer and air cool—thanks to grand open rayon. Slacks are heavier and crush-resistant. Both are Salyne and perfectly washable. Colors: Linen, leather, blue, deep green, light green. Long sleeve shirt (\$4). Short sleeve shirt (\$7). Collarless jacket to match (\$12.50). At quality stores or write David D. Donagh Co., Fifth Avenue, New York City.

*Look for the Salyne Label*

Salyne washes perfectly

**MCGREGOR**  
SPORTSWEAR



## WE STARTED SOMETHING!

Loafers are skyrocketing in popularity. Imitated? Naturally. But if you want all the supreme comfort and authentic smartness of these flexible, hand-sewed, soft shoes . . . see that you get the patented Originals . . . by Nettleton!

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FREE STYL  
E LOAFERS  
*Send Postal*

NOW 12 STYLES  
of Loafers for every  
footwear need

**Nettleton**  
LOAFERS

# HOW TO FARE WELL AT THE SAN FRANCISCO EXPOSITION

Arrange Everything In Advance!

Thinking of spending your vacation in the West? Here is the *carefree* way to do it! Go by rail, in a swift, luxurious train ...and let American Express Travel Service arrange your itinerary. Whether you are going only to the San Francisco Fair, or wish to see other parts of the West, "America's Foremost Travel Organization" can relieve you of many troublesome details.

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For full details of this trouble-saving plan, just ask the ticket agent where you buy your transportation. It is wise to plan now...to assure good hotel accommodations!

When you arrange your trip, protect your travel funds with American Express Travelers' Cheques. A safe, convenient protection against loss or theft. Acceptable anywhere!



Consult any Railroad Ticket Office, your Travel Agent or any American Express Office

## AMERICAN EXPRESS TRAVEL SERVICE AND RAILROADS OF AMERICA

*Whisk* through your ironing with this amazing **Steem-Electric steaming iron**

Performs a dozen jobs you never dreamed you could do at home

• Amazingly, the Steem-Electric Steaming Iron creates its own steam and dampens while you iron. Saves hours and hours of work...does finer, lovelier ironing...and does "tricks" that were never possible with ordinary irons. Easier to use because it glides on a cushion of steam—no tiresome lifting. Safe on any fabric...WILL NOT SCORCH OR BURN. Guaranteed.

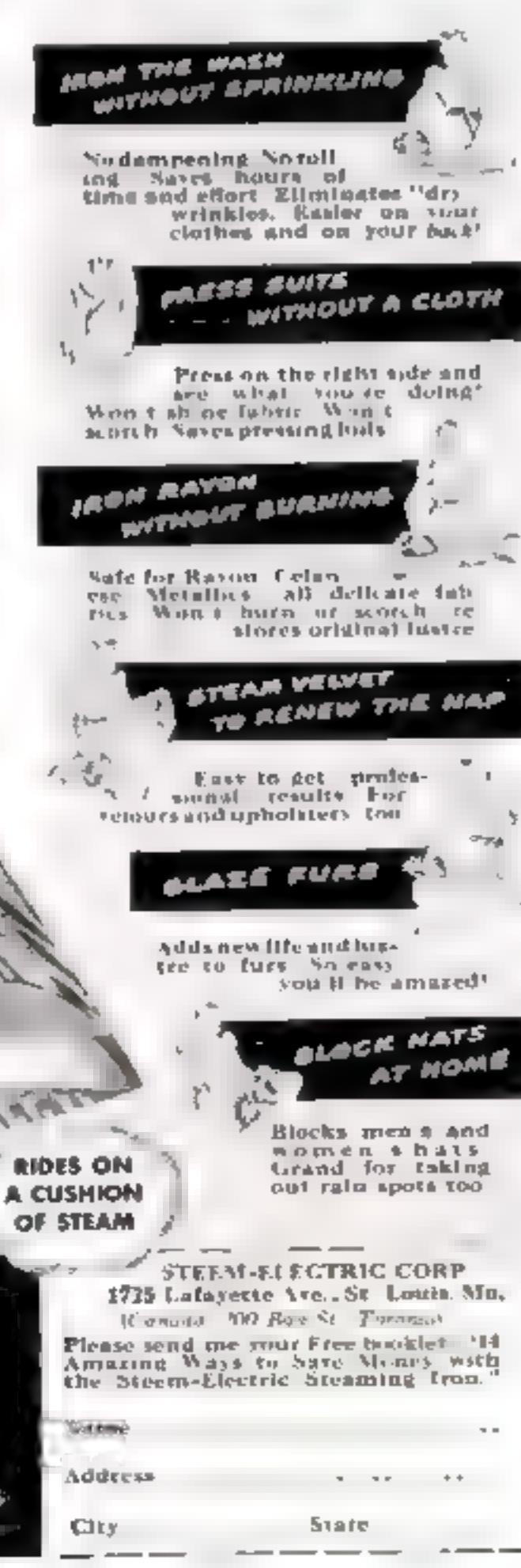
Just put in a pint of water, plug into light socket—and when steam appears you're ready for any ironing task!

A.C. or D.C.



**NEW**  
**Steem**  
**ELECTRIC**  
**IRON**

NO SCORCHING  
NO WRONG-SIDE IRONING • NO SHINE TO DULL FABRICS



## THE GIRL OF YESTERDAY

America is rich in beautiful girls. In the opinion of leading illustrators, American women today are 1) lovelier than ever, 2) prettier in the Occident. The statue at left is a scientific composite of the American college girl of 1890. She stood 5 ft. 3 in. tall, weighed 114 lb. Today she is 2 in. taller, weighs 10 lb. more, has slimmer hips, wider shoulders, longer legs.

No longer do American women try to look like *femmes fatales*. The Colleen Moore bob and Clara Bow burls of the Flapper Era have given way to upswept hair. On these pages are pictures of Louisiana State University's "prettiest co-eds" and Beauty Queens over a 20-year period. They show that ears came into view by 1927 and hair was first brushed off the face in 1929. Instead of toothsome, doll-like expressions, today's beautiful girls look poised.



AMERICAN COLLEGE GIRL 1890



MARGARET MIDDLETON



AMELIE PRESCOTT



STERLING GREER



MYRTLE SCOBLE



VIDA PELAYO



MARY LEWIS FORT



VIRGINIA WELLS



1929

MARIE LOUISE JACKSON



1930

LUCILLE ROUND



1931

VIRGINIA ("PUTSY") KILBOURNE



1932

MARY STUART WILLIAMS



1934

RUTH ROBINSON



1935

URSULA COMPTON



1936

JANE GIBSON



1937

BURNS DEANE COAKER



1938

RAE KAPLAN

## Do your BULGES make you mirror-shy?



"Spencer advertising has made me 'bulge conscious!' I can't pass a mirror without thinking of my figure." "Wear a Spencer and you'll lose those bulges!"



(A short time later) "How do I look in my new Spencer?" "Fine—It ought to be a pleasure to look in a mirror now. You look years younger."

### HOW TO LOSE YOUR BULGES IN TWO MINUTES

Your Spencer corset and brassiere will effectively correct any figure fault because every line is designed, every section cut and made to solve your figure problem and yours only.

Spencers are light and flexible yet every Spencer is guaranteed to keep its lovely lines as long as it is worn! No other corset, to our knowledge, carries this guarantee.

#### Have a figure analysis—free

At any convenient time, a Spencer Corsetiere, trained in the Spencer designer's methods of

figure analysis, will call at your home. A study of your figure will cost you nothing. Stop experimenting. Prices depend on materials selected. A wide range to suit every purse.

*Send for interesting free booklet  
"Your Figure Problem"*

Look in your telephone book under "Spencer Corsetiere" and call your nearest corsetiere or send us the coupon below for booklet. This will not obligate you in any way.

\*\*\*\*\*  
Copyright, 1938, Spencer Corset Co., Inc.

**Write Anne Spencer**

for personal advice  
**FREE** on figure  
faults checked here.

June 5, 1938

Anne Spencer  
Spencer Corset Co., Inc.  
133 Derby Avenue,  
New Haven, Connecticut.



Name \_\_\_\_\_

Address \_\_\_\_\_

*Also made in Canada and England at Rock Island, Quebec, and 33 Old Bond, London, W. I.*

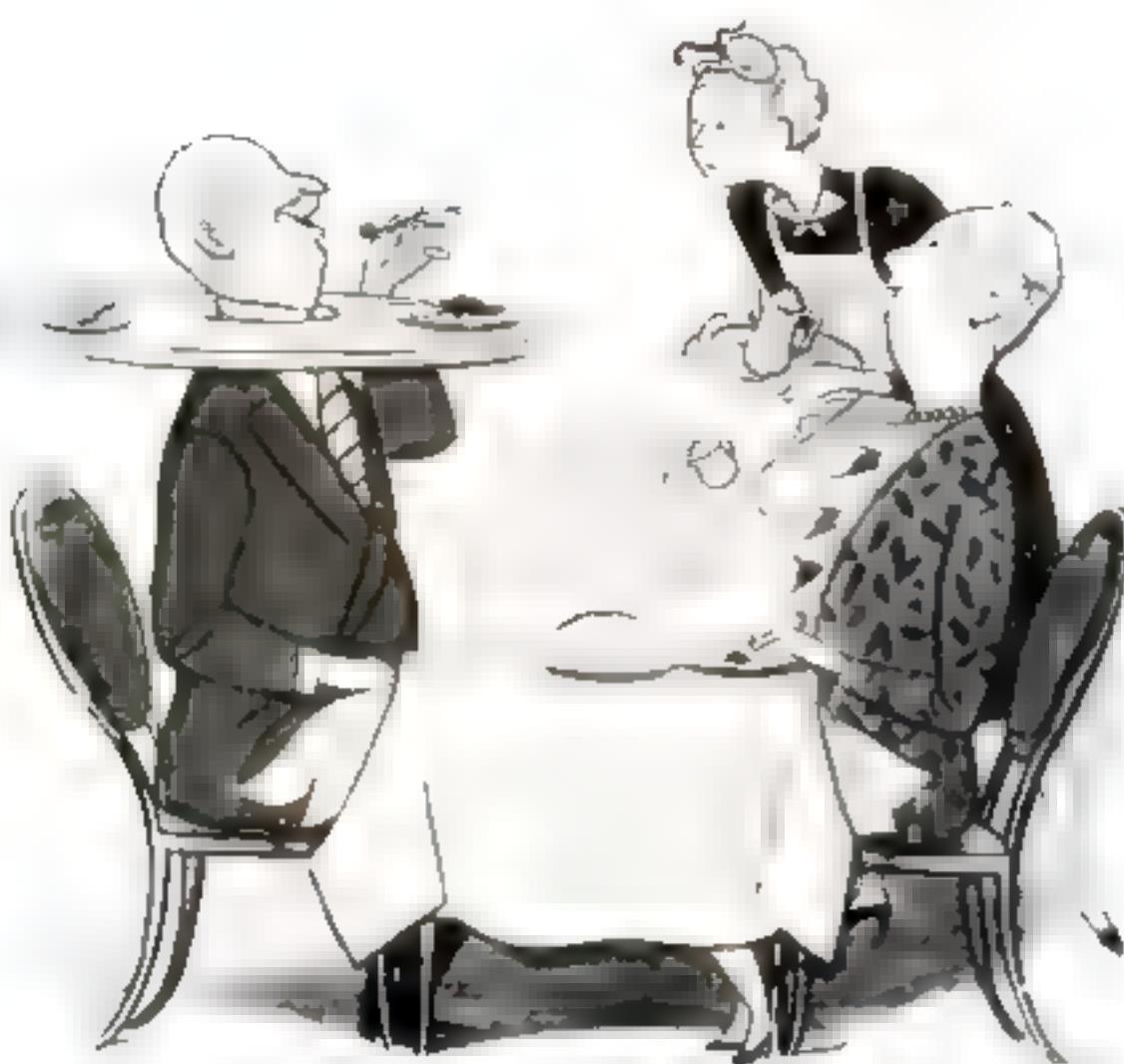
**SPENCER** *INDIVIDUALLY  
DESIGNED* **CORSETS**

(continued)

## THE GIRL OF TOMORROW

No one knows exactly what the girl of tomorrow will look like. Scientific studies show that she will probably be still taller and slimmer than the girl of today. Fashion writers frequently go out on the limb of prophecy to create a "Miss 1950." Dress designers and lately industrial designers have fashioned futuristic gowns for the working girl, hostess and sportswoman of the coming day.

Unblessed with such gifts of prophecy, LIFE asked Hollywood's experts on girldom to project their own imaginations into the future and to choose and make up the movie star of the future. For models Milo Anderson, Warner Bros. dress designer, picked Jane Wyman (*bottom*); Clay Campbell of 20th Century-Fox picked Lynn Bari (*directly below*). On these pages you see both girls made up in futuristic fashion.



"He's been eating that way  
ever since he got his Arrow Tie"

• When you get an Arrow Tie, a handsome pattern isn't all you get. You also get a mighty fine fabric, tailored to resist wrinkles, cut to tie into a perfect, dimpled knot. Ask your Arrow dealer today for some refreshing Summer Arrows. Swell buys at \$1.00 and \$1.50.

### ARROW TIES *As Outstanding as Arrow Shirts*

Made by Cluett, Peabody & Co., Inc.

PRODUCT OF DESTILERIA SERRALES, INC. PONCE, PUERTO RICO

**Compare**  
THIS FINEST OF  
PUERTO RICAN RUMS WITH  
ANY RUM IN THE WORLD!

Try Don Q in a frosty Dauphine or a  
ta-refreshing Rum & Hins. Compare!  
You'll insist on this finest of Puerto  
Rican rums forever after! Available  
at all good dealers, hotels, restaurants  
and bars—in fact, wherever quality  
drinks are the rule of the house.

86 Proof  
BOTTLED IN U.S.A. — Don Q  
WHITE LABEL FOR COCKTAILS  
COLD LABEL FOR TALL DRINKS

**Don Q Rum**  
PUERTO RICAN

Four Guide to Good Liquors  
Copyright 1939. National Distillers Products Corporation, N.Y.



Wire eyelashes and a lacquered wig to match the color of her costume are worn by this girl of the future. Her indehible lipstick lasts for weeks. A make-up foundation of heavy oil protects her skin as she speeds through world of the future



Instead of hats the girl of tomorrow will often wear a flower in her hair with curls shaped around it to resemble a hat.



Like a Greek warrior, tomorrow's girl will wear helmet-like hats of celluloid. Her hair will be a mass of curled ringlets.



A futurama of the female form divine: slim waist, broad, athletic shoulders and shapely legs. Between the top and bottom of her bathing suit are stuck shiny, star-shaped beauty spots. Deep-soled shoes add height and emphasize her natural figure.

# Kensington

. . . A JOY FOREVER . . .



THE AZTEC FOOTED PLATTER. A welcome gift in any home. 16 inch size, No. 7105, \$10.00; 12-inch size, No. 7106, \$7.50.

*Suave with the Lustre of old silver*



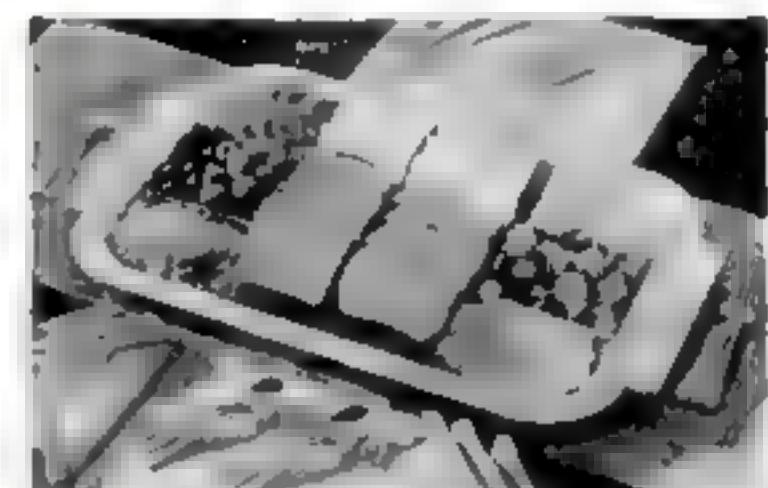
THE COLDCHESTER JULEP TUMBLERS. For frosty tall ones. Height, 5½ inches. Capacity, 14 ounces. No. 7252, \$2.50 each.



THE MING BOWL. Exquisitely simple and simply exquisite. Fruit, flowers, nuts. Diameter, 7 inches. No. 7426, \$5.00.



THE COMPASS PLATTER. Lacquer, canape, or sandwich tray. Beautiful decorative plaque. Diameter, 15 inches. No. 7102, \$8.50.



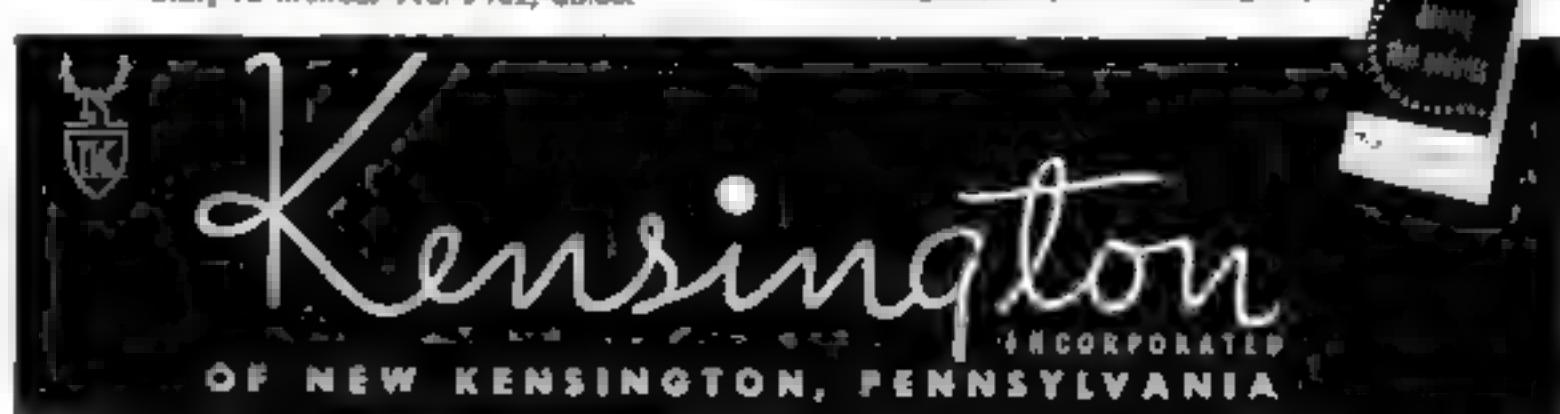
THE CLIPPER SHIP BUFFET SERVER. Bread board and dividers removable. Generous size, 14½ x 22½ inches. No. 715214, \$12.50.



THE CLOTHMASTER AND HATMASTER. Good brushes; space for engraving. Clothmaster, No. 7693, \$2.00. Hatmaster, No. 7692, \$1.00.

• There are Kensington gifts from 50c to \$20.00. Attractive displays now at department stores, jewelers, specialty shops. See them while selection is best.

For folder describing all Kensington items and for name of nearest dealer, write Dept. LB, Kensington, Inc., New Kensington, Pa.



# "You rich girls aren't the only ones! NOW WE WHO BUDGET CAN HAVE PERCALE SHEETS, TOO!"



"WE LOVE PERCALE TOO, you know . . . they're so smooth and cool and fresh! And now, thank heaven (and Cannon!) we too can spread our beds with percale's snowy, rustling fineness . . . M-mum, it's a gorgeous feeling!"

Yes, Cannon is now actually turning out a percale sheet that costs only a few pennies more than heavy-duty muslin! There's no reason now why you can't stretch out between smooth percale sheets every night of your life! . . .



Light, easy to launder! And these percale sheets are a full half-pound lighter per sheet than heavy muslin. Think how much easier they are to launder! And if you send your sheets out, at pound rates, Cannon Percale can save you laundry costs of about \$3.25 a year for each bed.



Exquisite . . . but husky, too! Cannon Percale Sheets are woven so firmly, closely . . . (25% more threads to the square inch than even the best-grade muslin) . . . that they can take the hardest everyday family wear!



Tabbed with convenient size labels! You'll like the "size labels" sewed into the hem of each Cannon Percale Sheet, so that you can tell at a glance what sheet for what bed . . . another little "nicety"!

Immaculate, packaged, ready for use, Cannon Percale Sheets sell in most stores for only about \$1.49. (Also available at slightly higher prices in six lovely colors: peach, azure, maize, pink, jade, dusty rose. Pillow-cases to match.)

And Cannon also makes a muslin sheet that's an equally outstanding value . . . at a price so low it will amaze you! **NEWS!** Cannon Hosiery! Pure silk . . . full-fashioned . . . sheer and lovely . . . better made to cut down "mystery runs." Ask about Cannon Hosiery at your favorite store.



\*This price may vary slightly due to different shipping costs and seasonal fluctuations of market prices.

Guaranteed by Good Housekeeping Magazine as advertised therein.

**CANNON MILLS, INC., NEW YORK, N.Y.**



*Life goes to*  
*The Futurama*  
at World's Fair where General  
Motors shows the America of 1960

Americans are intensely curious about the future of their country. Here you see a few of the million visitors to New York World's Fair who have already lined up outside the General Motors exhibit to see a magnificent and detailed model of "the America of 1960." This Futurama, easily the smash hit of the Fair, covers 35,700 sq ft and takes 15 minutes to view from moving armchairs. For what the spectators see, turn the page.

CONTINUED ON NEXT PAGE

Copy

*Life goes to The Futurama* (continued)



Two 14-lane express highways cross in 1960

# America in 1960

On an early June afternoon in 1960, the trees of the U. S. are still green and the wheat yellow. The sun shines; night must fall; people are being born and eating and sleeping and dying. But the works of man are subtly or spectacularly different. The land is really greener than it was in 1939. Strip planting protects the valley fields against erosion. Federal laws forbid the wanton cutting of wooded hillsides. Dams and canals prevent freshets and floods. Men love their fields and gardens better and more wisely. Fewer acres, intensively and chemically cultivated, feed all the citizens of the U. S. More of the surface of the land is in forest and park.

These great parklands of America in that June of 1960 are full of a tanned and vigorous people who in 20 years have learned how to have fun. They camp in the forests and hike along the upcountry roads with their handsome wives and children. The college class of 1940 is out there hiking, half its members alive and very fit. They swarm into planetaria to see the cosmos. Great telescopes show them 100 times more than the men of 1939 saw in the sky. On the earth, these people do not care much for possessions. They are not attached to their own homes and home towns, because trains, express highways (and of course planes) get them across America in 24 hours. They have their choice of all America for their two-month vacations. Some own cars or trailers; some hire cars at their destinations. When they drive off, they get to the great parklands on giant express highways (*see opposite page*).

The two-way skein shown consists of four 50-m.p.h. lanes on the outer edges, two pairs of 73-m.p.h. lanes and in the center, two lanes for 100-m.p.h. express traffic. Cars change from lane to lane at specified intervals, on signal from spaced control towers which can stop and start all traffic by radio. Being out of its drivers' control, each car is safe against accident. When two such highways cross, as shown, the high-speed lanes go straight ahead; the low-speed make both left and right turns to get on the other highway. These are raised or depressed, taking less space than in the cloverleaf pattern of 1939's highway crossings. Notice that there is no bottleneck. All cars keep going at least 50 m.p.h. on all turns. The cars, built like raindrops, are powered by rear engines that are probably improvements of the Diesel. Inside, they are air-conditioned. They cost as low as \$200. Off the highway, the driver dawdles again at his own speed and risk.

The highways skirt the great cities, one of which looms in the distance in the picture at right above. But the happiest people live in one-factory farm-villages producing one small industrial item and their own farm produce.

Behind this visible America of 1960, hidden in the laboratories, are the inventors and engineers. By the spring of 1939 they had cracked nearly every frontier of progress and waited on unwieldy, cautious industry to feed their inventions to the people. Liquid air is by 1960 a potent, mobile source of power. Atomic energy is being used cautiously. Power is transmitted by radio beams, focused by gold reflectors. These great new powers make life in 1960 immensely easier. Such new alloys as heat-treated beryllium bronze give perfect service. Cures for cancer and infantile paralysis have extended man's life span and his wife's skin is still perfect at the age of 73. Architecture and plane construction have been revolutionized by light, nonflammable, strong plastics from soybeans. Houses are light, graceful, easily replaced. The Lanova Cell has made all gasoline motors Diesels. Electronic microscopes literally see everything.

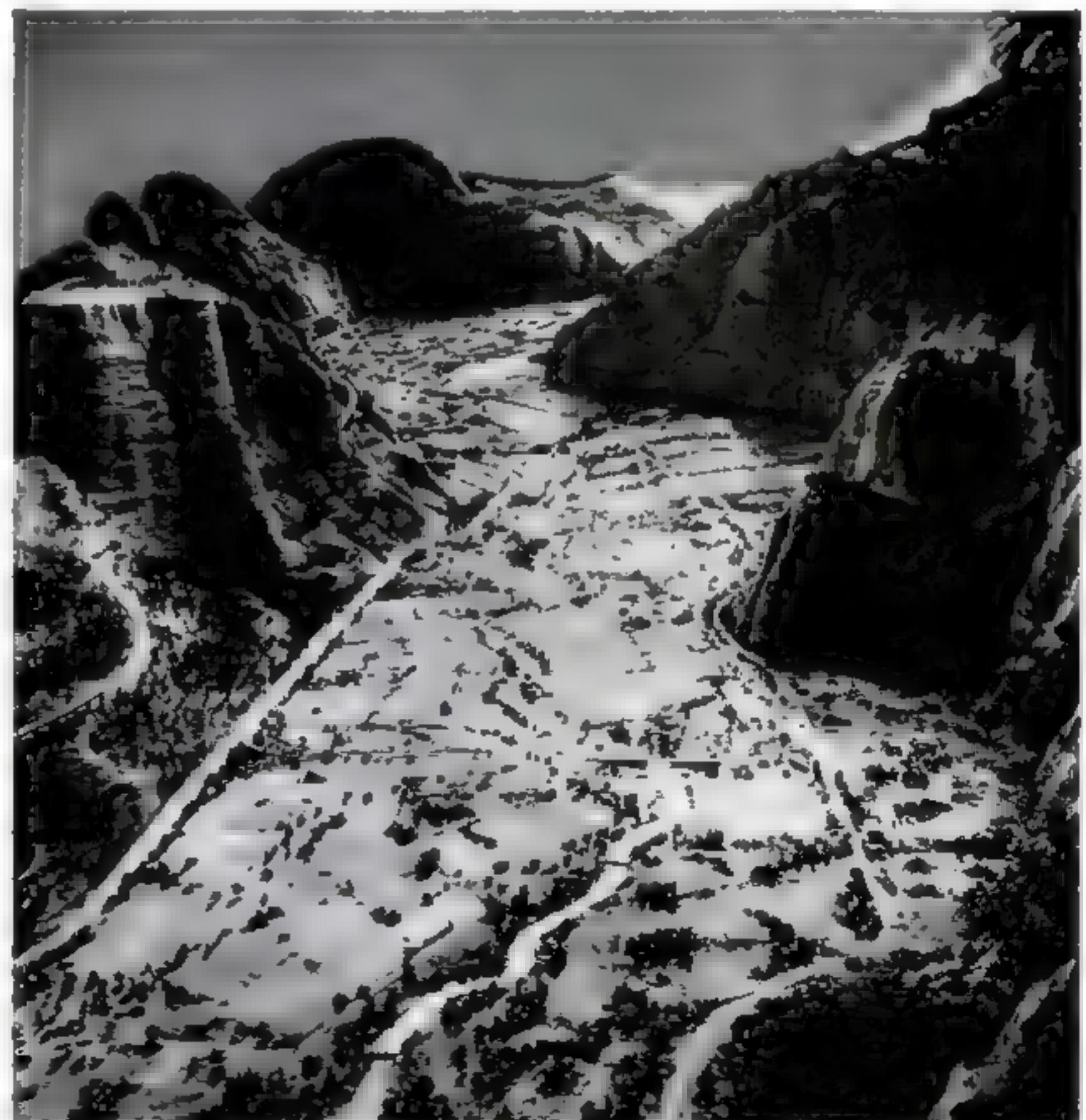
On every front America in 1960 knows more about unleashing the best energies in its citizens. Nearly everyone is a high-school graduate. The talented get the best education in the world. More people are interested in life, the world, themselves and in making a better world. The people of 1939 are still very much alive, pitting their old prejudices and fears against the new world. Politics and emotion still slow progress. But these obstructions are treated with dwindling patience in 1960. America's appetite has been whetted by its widening realization of what sober, courageous planning can do.

All of this—much of it to be seen in model in the General Motors Futurama at the New York World's Fair—is a vision already conceived by 1939's engineers. It is a vision of what Americans, with their magnificent resources of men, money, materials and skills, can make of their country by 1960, if they will.



The Mississippi winds across General Motors' great Futurama at the New York World's Fair. Parts of this superb model are roughly based on actual American terrains. The two cities in the

foreground resemble South Paterson, N.J., and Omaha, Neb., neither of which is on the Mississippi. The great city in the distance is based on St. Louis, grown 21 years older and bigger.



The Yosemite Valley (largely revised by General Motors for the sake of simplicity) takes its high speed roads up 4,000 ft. in 14 miles without a grade of more than 4% at any point. Cars can take turns

at 50 m.p.h. Around the turn at the top is the great dam shown on the next page. Elsewhere the model imitates the Continental Divide, the Catskills' Ashokan Reservoir site, the Bad Lands,

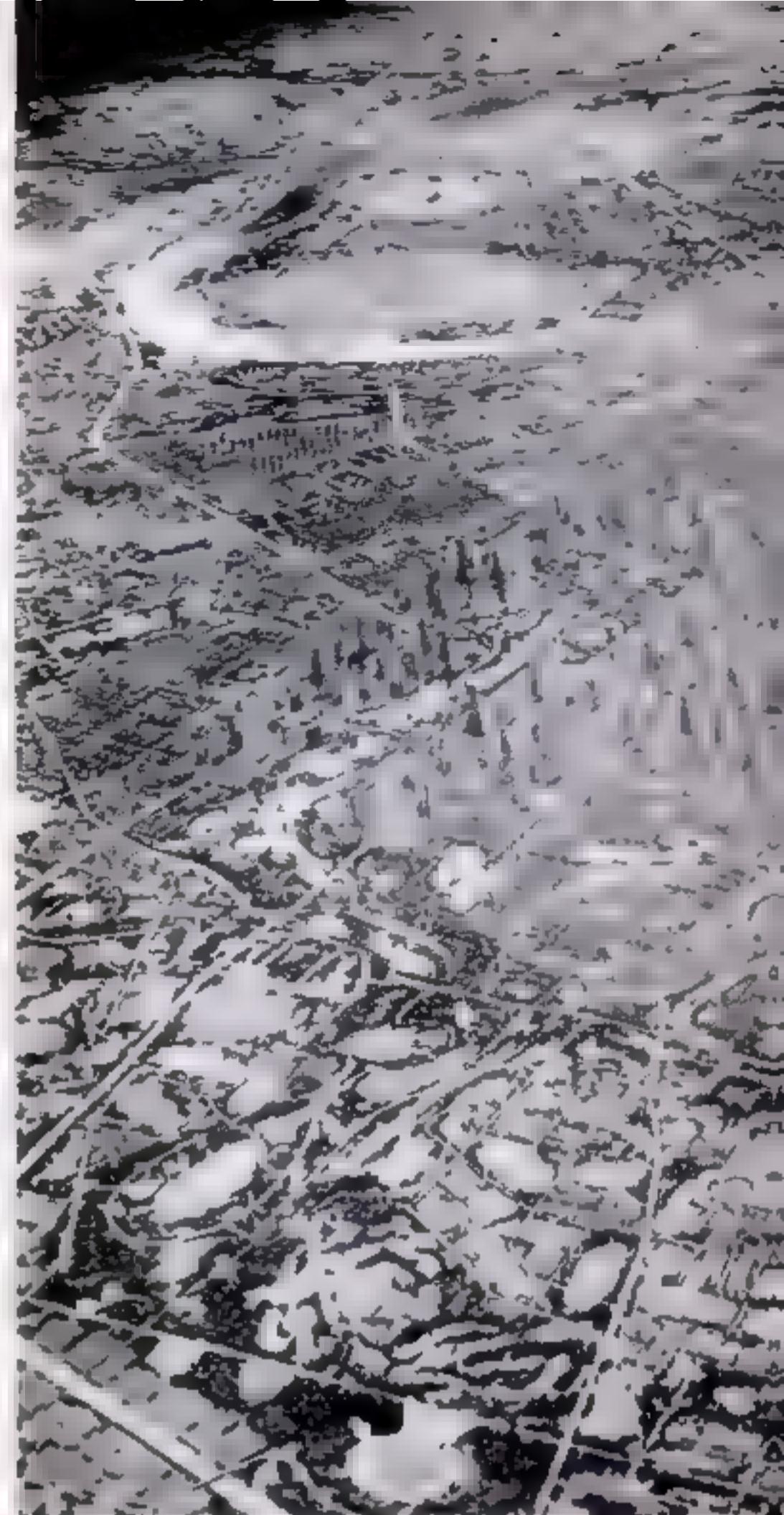


This great dam is not much better than the dams of 1939 which were 88' higher. It prevents the fertile valley below from being flooded, in the spring it sends high and pow-

er to kitchens and farms hundreds of miles around. The express highway is routed along the very top of the dam. The landscape is a rough copy of the head of Yosemite Valley

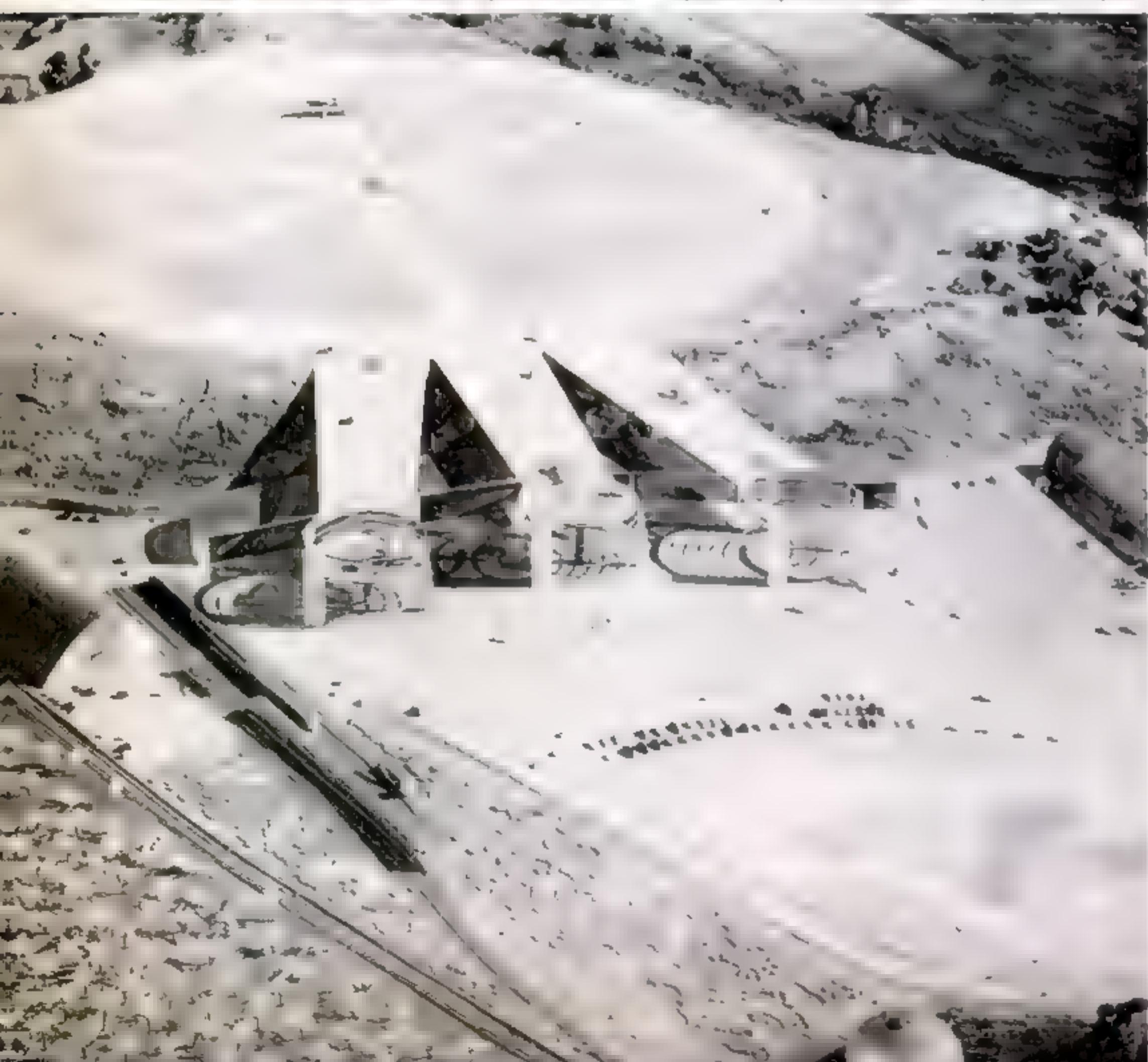
A small-town airport has three circular elevators which lower arriving planes to the subterranean hangars. Outside waits a line of 1960 automobiles which are powered by rear

engines and are designed in the teardrop form. Probably by 1960 further invention will have lowered the landing speed of planes to a point where they will be practically foolproof



The city is roughly based on St. Louis. The Mississippi curves in the distance. Skyscrapers, and other buildings are separated by parks. Beyond them are old fashioned buildings of flat

An amusement park winds up out of the right. At the right is a roller coaster, at top, a crazy go-round. The car-like apparatus at left is a suspended monorail where the cars are swinging





River front is parked and the industrial section is isolated along the river. A great grid of highways leads traffic out to the satellite residential towns. In distance, East St. Louis and airport

out toward the edge of the car's lobes by their own centrifugal force. It is important to remember that the people of 1960 have more time, more energy and more tools to have fun.



A city street of 1960 completely separates automobiles and pedestrians. Sidewalks and show windows are at the second-story level. Cars drive from ground roadways to great park-

ing spaces under buildings. The roofs of the low-slung buildings are parks and restaurants. Model car column is where General Motors plans to be selling cars in the city of 1960.

An experimental forcing farm. The centrifugal power plant at lower right pumps water and chemicals from the tanks at upper left, mixes them and pipes them all over the farm to the

nursery (left), orchard (foreground) and globe at upper right, shielding under glass domes such tropical plants as rubber. Other towers and tanks store and feed out the chemicals.



**WITHOUT BURNING!**

Now, a sunburn preventive protects even blond skin from painful burning . . . helps you take a lovely tan. Skol is made after a formula originally developed in Sweden. Now it's known in 25 different countries for these 3 specific advantages:

- 1 Blocks out harmful, burning rays.
  - 2 A greaseless liquid—quick drying—easy to use.
  - 3 NON-oily—does not pick up sand.

**SKOL**

## *America in 1960* (continued)



**The city of 1960** is inspired by 1,500-ft. skyscrapers, widely spaced, with parks on the roofs of the intervening low apartments. The horizontal black stripes around the buildings are windows. All offices, built around elevator banks, have outside exposure.



**The farm of 1960** nestles far from the express highways, its fields more fertile and greener than ever, its farm buildings prefabricated, its barns hung from parabolic trusses. A row of domed fruit bins waits for the orchard at the top to fill them.

# LIFE'S PICTURES



Horace Bristol is here seen climbing a cliff to take the picture of the Laramie valley shown on pages 16 and 17. Bristol covered 4,000 miles in a week to take pictures of the Northwest. More than 100 photographers traveled longer distances to get U. S. pictures for this issue than for any previous issue of *LITTLE*.

The following list, page by page, shows the source from which each picture in this issue was gathered. Where a single page is indebted to several sources credit is recorded picture by picture (*left to right, top to bottom*), and line by line (*lines separated by dashes*) unless otherwise specified.

ABBREVIATIONS: BOT., BOTTOM, CAN  
TER, © COPYRIGHT EXC. LATE M.  
LEFT, RT. RIGHT, T TOP, B. B., B. & B.  
INT. INTERNATIONAL, W. W. WIDE W. W.

# TEACHER'S

Perfection of Blended  
SCOTCH WHISKY



86 PROOF



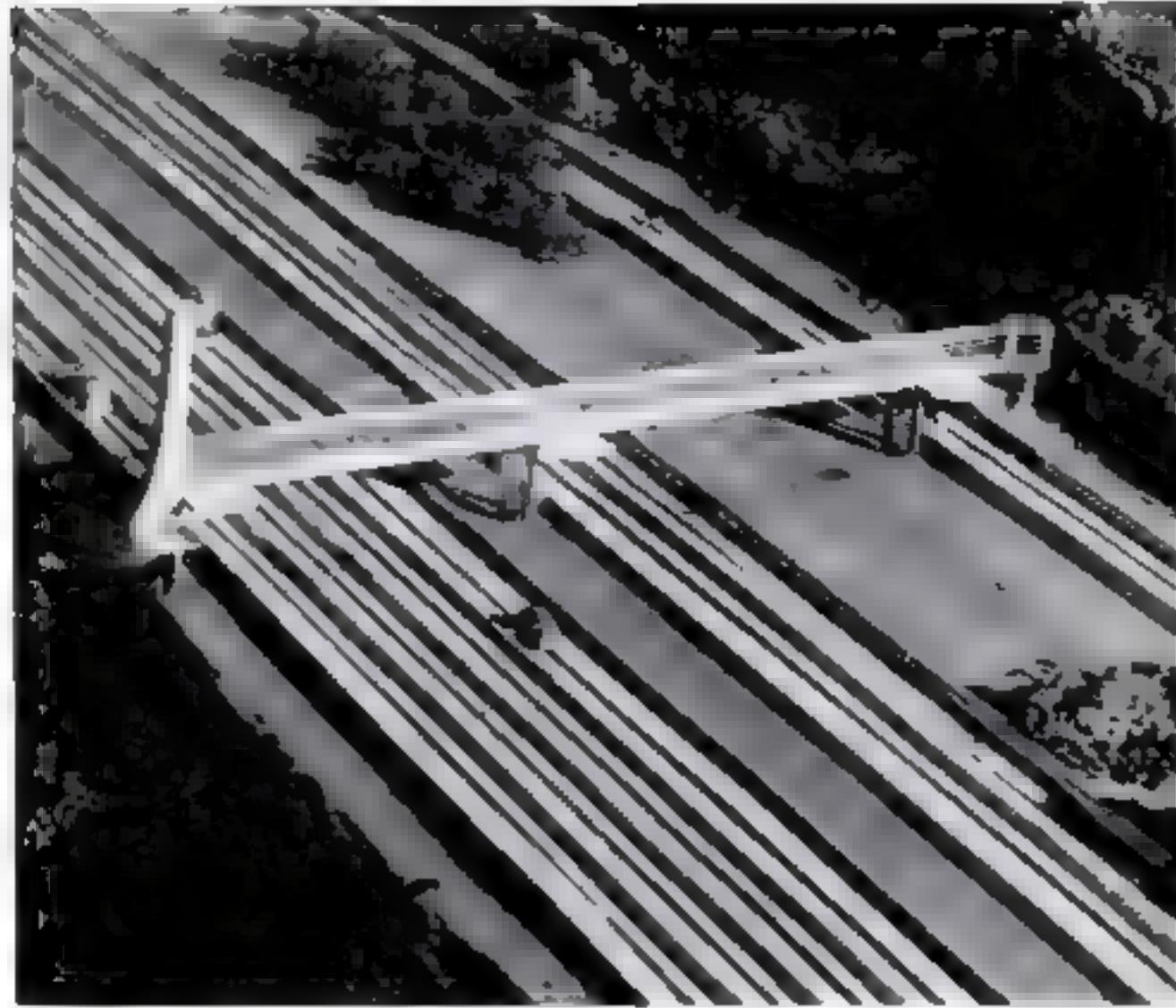
Old Grads renewing their ties of youth...good fellows gathered together everywhere... suggest to you this phase of adult education: learn about Scotch from Teacher's.

*"It's the flavour"*

Made since 1830

by Wm. Teacher & Sons, Ltd., Glasgow

SOLE U. S. AGENTS, Schieffelin & Co.,  
NEW YORK CITY • IMPORTERS SINCE 1794



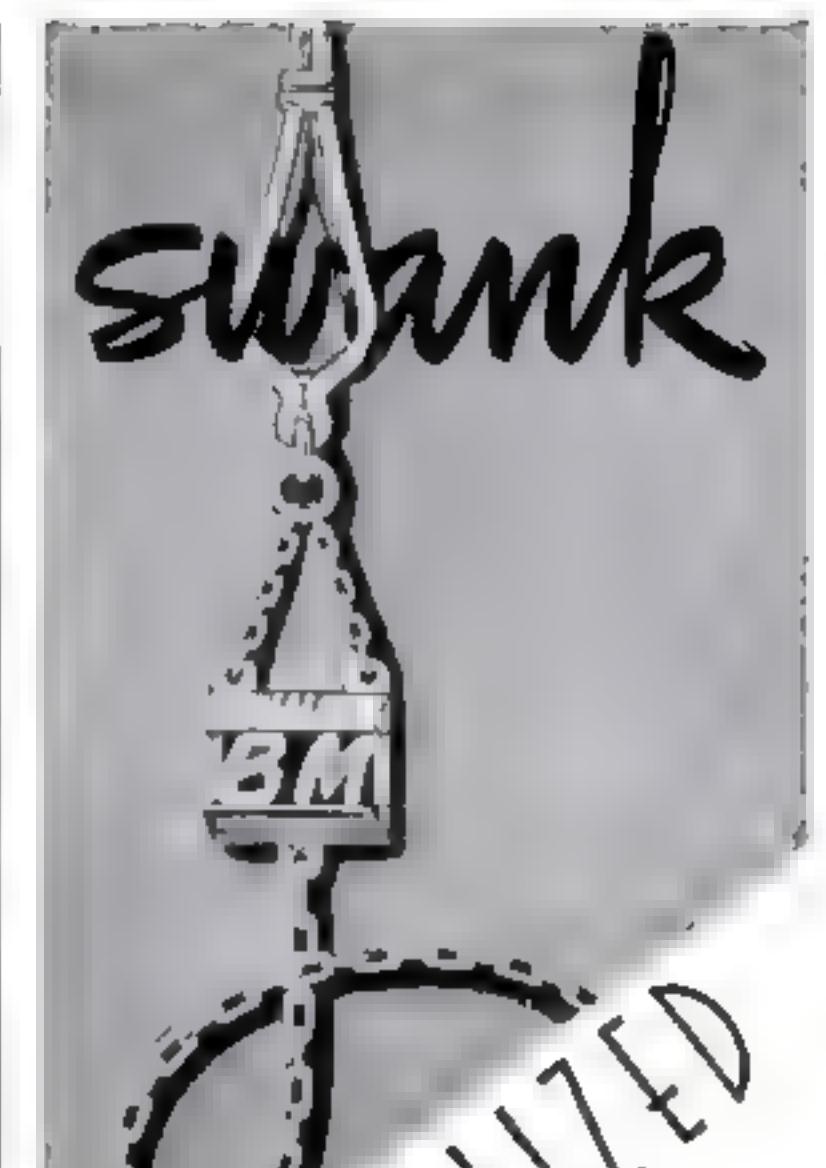
The one-way express highway of 1960 has four lanes for 60-m.p.h. traffic (left), two 75-m.p.h. lanes and one 100-m.p.h. lane (far right). Cars fit one to a lane, at regulated intervals. All cars are controlled by radio from towers every 5 mi.



As night falls on this spring day in 1960, the floodlights go on in a quarry in the mountains and a night shift goes to work. Earth's metal resources are still huge. Pure aluminum is  $\frac{1}{10}$ th of earth's crust. Only 10% of the iron ore has been mined.

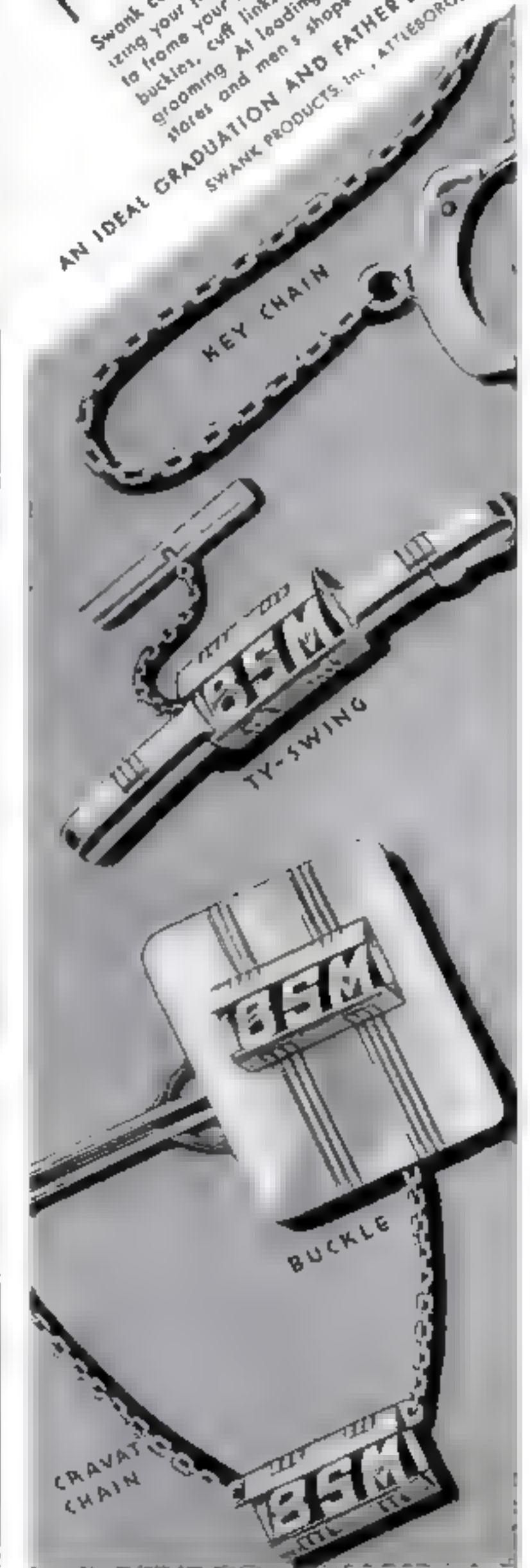


A General Motors man steps into one section of the Futurama to show its scale. He is working on the single catenary suspension bridge in which all weight is carried by one cable over the towers and anchored in the solid rock of the mountains.



SWANK  
PERSONALIZED

Swank continues the tradition of individualizing your jewelry with a new classic design to frame your initials or cravat chain, belt buckles, cuff links and other aids to good grooming. At leading jewelers' and department stores and men's shops... \$1 and \$1.50 SWANK PRODUCTS, INC., ATTLEBORO, MASS.





## ATHLETE'S FOOT

According to the Government Health Bulletin No. E-28, at least 80% of the adult population of the United States are being attacked by the disease known as Athlete's Foot.

Usually the disease starts between the toes. Little watery blisters form and the skin cracks and peels. After a while the itching becomes intense and you feel as though you would like to scratch off all the skin.

### Beware of It Spreading

Often the disease travels along over the bottom of the feet. The soles of your feet become red and swollen. The skin also cracks and peels, and the itching becomes worse and worse.

Get relief from this disease as quickly as possible, because it is very contagious and it may go to your hands or even to the under arm or crotch of the legs.

### Here's How to Relieve It

The germ that causes the disease is known as *Tinea Trichophyton*. It buries itself deep in the tissues of the skin and is very hard to kill. A test made shows it takes 15 minutes of boiling to kill the germ, so you can see why the ordinary surface remedies are not satisfactory.

H. F. was developed solely for the purpose of treating Athlete's Foot. It is a liquid that penetrates and dries quickly. You just paint the affected parts. It peels off the tissues of the skin where the germ breeds.

### Itching Stops Quickly

When you apply H. F. you should find that the itching is quickly relieved. You should paint the infected parts with H. F. night and morning until your feet are better. Usually this takes from three to ten days, although in severe cases be sure to consult a specialist.

H. F. should leave the skin soft and smooth. You may marvel at the quick way it brings you relief; especially if you are one of those who have tried for years to get relief from Athlete's Foot without success.

### H. F. Sent on Free Trial

Sign and mail the coupon and a bottle of H. F. will be mailed you immediately. Don't send any money and don't pay the postman any money. Don't pay anything any time unless H. F. is helping you. If it does help we know you will be glad to send us \$1 for the bottle at the end of ten days. That's how much faith we have in H. F. Read, act and mail the coupon today.



GORE PRODUCTS, INC.  
835 Perdido St., New Orleans, La.

Please send me immediately a complete supply for foot trouble as described above. I agree to use it according to directions. If at the end of 10 days my feet are getting better I will send you \$1. If I am not entirely satisfied I will return the unused portion of the bottle to you within 15 days from the time I receive it.

NAME \_\_\_\_\_

ADDRESS \_\_\_\_\_

CITY ..... STATE .....

## THE FUTURE IN THE NEWS

Sir:

While all the world has been thinking of war during the past six months, perhaps some of your readers have missed the enormously rapid strides being made by our scientists and technicians. I am sending you some newspaper headlines of the past half-year which give an idea of the world of tomorrow. The selection of headlines was made from my accumulation

of clippings that I mount on cardboard shirt-boards. I find that the technological developments just about keep pace on the newsfront with my supply of shirt-boards.

R. BUCKMINSTER FULLER  
New York, N.Y.

To Mr. Fuller, inventor of the dymaxion car, author of *Nine Chords to the Moon* and expert on America's future, LIFE's thanks.—ED.

## ATOMIC PHYSICS

# Einstein Believes He's Found Solution to Gravitation Riddle

Thinks Discovery May Provide Clew to Law Clearing Up Structure of Whole Universe

## NEW CORNELL 'GUN' A 'DAVID' TO ATOMS

It Can Hurl Atomic Projectiles With Energies Corresponding to 500,000 Volts

## NEW KEY IS FOUND TO ATOMIC ENERGY

Actino-Uranium Is Credited With Power to Release Largest Store Known on Earth

## Endless Duel of Atoms Declared Source of Fuel in Furnace of Sun

# Atomic Energy Released

## MEDICINE

### 1,000,000-Volt X-Ray Is Made As Cancer Aid

Tube Equal to \$90,000,000 in Radiations Small Enough To Be Carried on Truck

### Solution to Riddle Of Breast Cancer Indicated in Tests

Female Sex Hormone's Role in Producing Disease in Rat Found

### NEW TEST REVEALS CANCER CHEMICAL

Physicians Also Report Young Yeast Cells by Methylcholanthrene

NEUTRON BEAM DISCUSSED

### INHALING OF OXYGEN CURES SEASICKNESS

Mayo Clinic Doctor Establishes Its Value on a Test Cruise

### ENZYME REPORTED HORSE SPEED SOURCE

Liver Catalase Isolated and Crystallized at Cornell

## X-RAYS REVERSE PROCESSES OF LIFE

Princeton Biologist Reports Regeneration of Limbs on Amphibia Stopped

## SAY NEW HORMONE EXTENDS WORK AGE

Doctors Report Synthetic Drug Restores Not Youth but Energy for Business

**Save Time and Labor with MONTAMOWER**

**Mows and Trims Lawns in One Simple, Easy Operation**  
Tired backs and aching arms just don't happen to users of Mont-Mower. All the drudgery and noise of lawn mowing is done away with. No dead weight to push. Instead, just 7½ pounds of live mechanism that first cuts grass, then cuts the grass closely, smoothly and to order. It cuts the grass through long grass, weeds, tight up dandelions, rocks and stones, trees and posts. Leaves no fringes to be mowed by hand. Cutters are self-sharpening. Built to last many years. Guaranteed. Thousands in use. Write for literature. Costs little.



MONTAMOWER DISTRIBUTING CO.

322 HOUSEMAN BLDG.  
GRAND RAPIDS, MICH.

- FREE

to Boys and Girls

(and parent or guardian)

**ALL-EXPENSE TRIPS**

to either World's Fair and 106 other prizes!

Nothing to Buy! Easy to Compete!  
And—it's Fun!

Go to your bicycle store and get an Official Entry Blank. Then write 100 words or less on "Why I Want a New Departure Speed Changer on My Bicycle." Mail it before midnight, June 30th, to

## NEW DEPARTURE

BRISTOL, CONNECTICUT

**WIN** An ALL-EXPENSE TRIP for yourself and companion, or one of the 106 other prizes. (Remember—nothing to buy! Get Official Entry Blank at your bicycle store now!)



THE NEW YORKER . . . Cheerful greeting or bright warning . . . your car can play "Boys and Girls Together" like the motor trains at New York World's Fair of 1939.

THE CALIFORNIAN . . . When the Golden Gate Exposition beckons, swing your way in safety with "California Here I Come" in brilliant, tuneful style.

SPARTON horns are made for every automotive need.

Variety Model is 100% for Models 40-50.

THE SPARTON-WITHINGTON CO., JACKSON, MICHIGAN.

Horns Refrigerators Radios



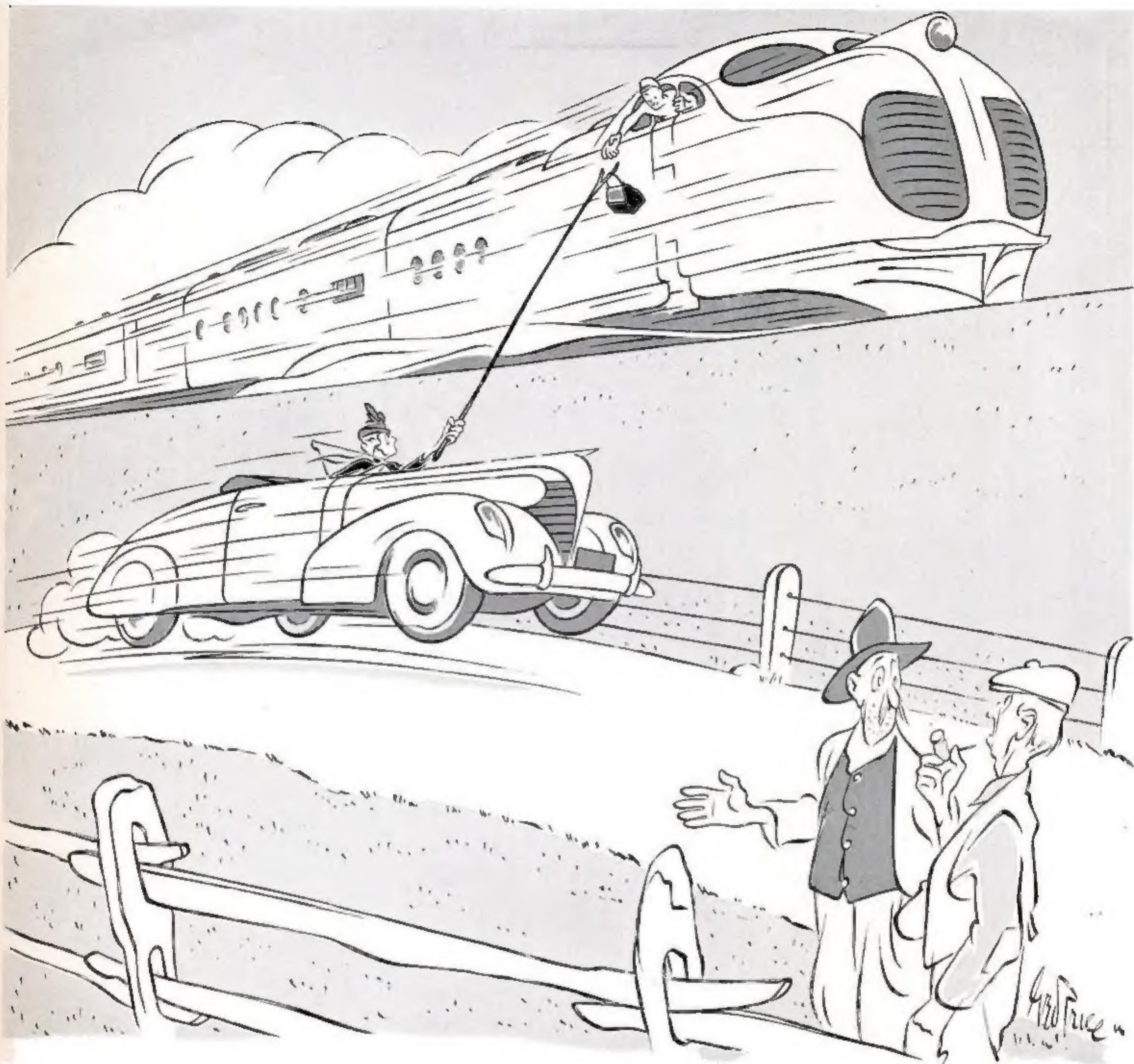
Speedy Comfort! No Uneasy Jitters

STANBACK! I use 27 years! Millions used yearly for speedy relief from headache, neuralgia, muscular aches and similar pains. You've wanted STANBACK'S fast relief, yet it

Try STANBACK 10¢ & 25¢ at drugstores.

TRIAL OFFER! 25¢ Package Mail this ad and today

STANBACK COMPANY, JACKSON, MICHIGAN



*"That's the Engineer's wife . . . she always brings him his lunch since she got these new Dunlops"*

We don't believe in racing trains, even with a 1939 car equipped with Dunlop tires. But you could if you had to! There's rocket speed bottled up under those gleaming hoods. There's almost unbelievable power-to-stop in those silken-smooth-brakes.

And, because of this, the strain on tires is terrific. It requires something extra today to build a tire that hour after hour, day after day, must meet such extreme demands.

It takes more care. And more experience. It takes knowledge of the kind that Dunlop has

gained through more than a half century of building tires to meet every condition in every part of the world.

You may be the one man in a hundred million with enough nerve to want to drive a gasoline thunderbolt across the salt flats of Utah at 357 miles an hour. Or, you may be a man of simpler tastes. One who merely likes to step on the accelerator and feel your brakes take hold when you want them.

Whichever camp you belong in, Dunlop engineers build tires to deliver all you expect

and a little more. Tires that are as foolproof and trouble-free as the world's greatest tire building experience can make them. Dunlop Tire and Rubber Corp., Buffalo, New York.

**DUNLOP**  
**TIRES**

**WHAT DO YOU EXPECT  
OF A VACATION?**

**GET THEM ALL IN  
MAINE**

PEACEFUL LAKES where you can swim, boat, fish to your heart's content. There are smart hotels, rustic camps and comfortable cottages. Take your choice of pleasures in Maine!



BEAUTIFUL SEA with cozy harbors, wide, uncrowded beaches and fun for everybody. Tempting Maine seafood — straight from the cold, clean waters to your table.

GIANT MOUNTAINS that tower above the graceful valleys. Good, scenic roads that invite you on and on. You can hike, climb, camp, ride. Play tennis or golf in Maine. Send the coupon!



SEE THE MAINE EXHIBIT AT THE WORLD'S FAIR THEN SEE MAINE!

GET MORE FOR YOUR MONEY—IN MAINE

**FREE!**

MAINE DEVELOPMENT COMMISSION  
Tourist Service, Department 612  
St. John Street, Portland, Maine  
Please send me the new, illustrated Official Maine Vacation Guide for 1938.

Name \_\_\_\_\_  
Address \_\_\_\_\_  
City \_\_\_\_\_ State \_\_\_\_\_

IT'S A CINCH TO  
REPAIR WALLS WITH  
**RUTLAND**  
PATCHING PLASTER



Just mix with water..Rutland makes a perfect patch..stays put..costs only a few cents.



**HEADLINES TO THE EDITORS**

(continued)

**INDUSTRY**

**Woman Makes Glass Invisible,  
Admitting 99 P. C. of Light**

Oily Coat, Thinner Than Light's Wave Length, Also Eliminates Glare from Any Angle

**STEEL TRANSPARENT  
UNDER NEW DEVICE**

Ottawa Scientists Develop X-Ray Apparatus to Detect Flaws

**NEW AERIAL  
FOR  
TELECASTS**

**VAST ELECTRIC 'SEA'  
EXPLORED BY RADIO**

**41,000,000 PHONES  
PREDICTED BY 1940**

Forecast by A. T. & T. Says World's Total Will Reach That Figure This Year

**AVIATION**

**MAKES PLANE DIVE  
575 MILES AN HOUR**

Test Pilot Sets a New Speed Record for Man in a New Curtiss Pursuit Craft

**Air Travel Increases**

**Clipper Starts  
Air Mail Line to  
Europe Today**

Weekly Round Trip Begins Here on 12th Anniversary of the Lindbergh Flight

**Aircraft Production Rising**

**HOUSING**

**BUILDING ACTIVITY  
IS BEST IN YEARS**

Total in 44 States for First Quarter Is \$846,189,562, Up From \$595,982,843 in '38  
GAIN IN HOMES PUT AT 119%

**Forecasts Homes  
Of Plastic Resins**  
Chemists Advise Standard Models

**MODERN LIVING**

**Social Diseases,  
Illegitimate Births  
Rise in Schools**

City's Rate, However Is Low as Disclosed In National Survey

**THE NEWEST  
prefabricated bathroom  
IS ALSO NEAREST**

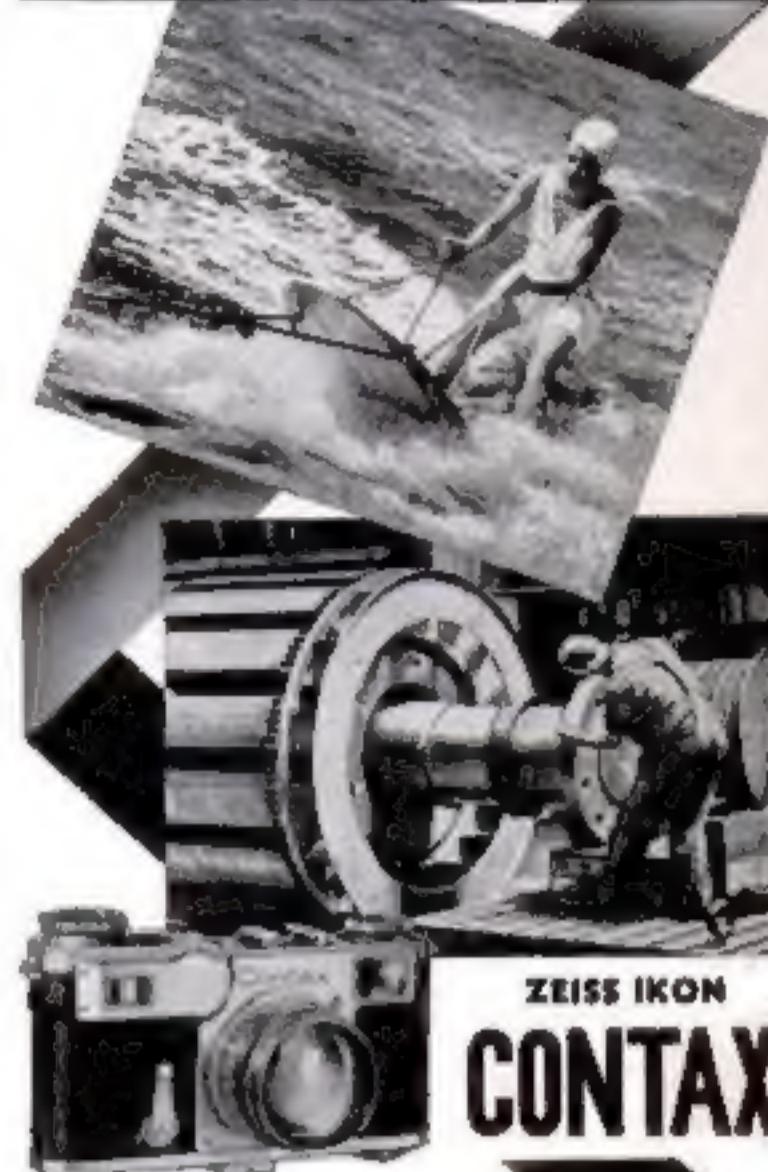
**Wormless Corn Grown**

**Finds Emotions Stop Rhythm  
Of Electrical Brain Waves**

Dr. Davis of Boston Proves It by Showing Electroencephalograms

**A NEW HIGHWAY TO THE ARCTIC**

**PRIZE WINNING  
PICTURES**



ZEISS IKON  
**CONTAX**

Two prize winners in the Zeiss Ikon Competition. Note the sharpness of detail and realistic force of the telephoto shot at top. The industrial scene below it was taken indoors in ordinary light, yet has extraordinary brilliancy and fine tonal quality.

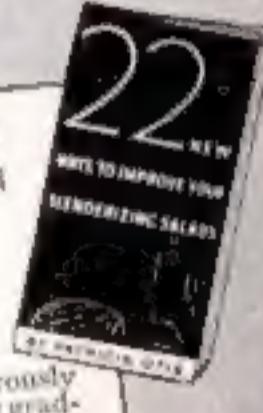
Many who took up Contax purely as a hobby are finding this all-purpose miniature camera invaluable in their work. Takes striking pictures of manufacturing processes, plant interiors, close-ups of products, etc. Choices of 15 interchangeable Zeiss Lenses.

At leading dealers. Write for Booklet, CARL ZEISS, INC., 485 Fifth Ave., New York, Dept. C-8-8, 728 So. Hill Street, Los Angeles.

**Salad for  
“HIM”**

--- shake up this different, inexpensive, "tangy" dressing in just a minute

**ROQUEFORT DRESSING**  
1/2 cup POMPEIAN Olive Oil  
4 tablespoons mild vinegar  
1/2 teaspoon salt  
Dash paprika  
1/2 teaspoon ground allspice  
1 tablespoon catsup  
1 tablespoon sugar  
Place in jar and shake vigorously for one minute. Add dressing gradually to two tablespoons mashed Roquefort Cheese. Stir till smooth.



The recipe above is only one of 22 different ways to make French-type dressings. Mail coupon below for the 22 tested recipes. Men-folks prefer these thin-type dressings to the "gooey," fattening kinda.

To derive the best flavor use Pompeian 100% Pure Virgin Imported Olive Oil. Pompeian improves any salad (or other things to eat) because only the best 25% of the oil from the choicest Mediterranean olives is used. Pompeian has an imported virgin flavor—which adds zest and tang to food.



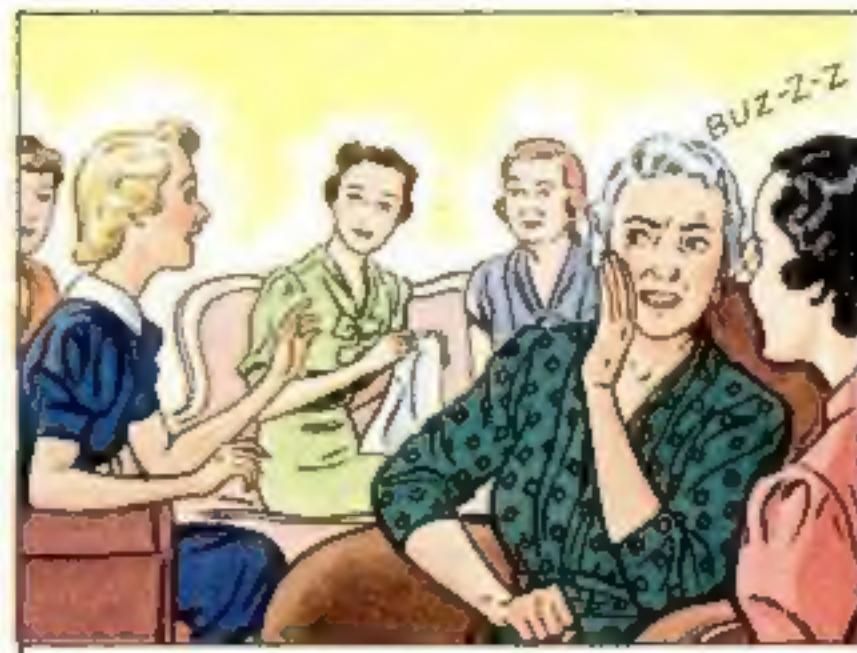
**SEND FOR FREE RECIPES!**

Pompeian Olive Oil Corp., Baltimore, Maryland

Please send me your FREE recipe booklet of 22 Tested Salad Dressings as described.

Name \_\_\_\_\_ Street \_\_\_\_\_  
City \_\_\_\_\_ State \_\_\_\_\_

# PAULA GIVES MOTHER-IN-LAW HER COME-UPPANCE!



"THAT LITTLE FLIBBERTIGIBBET!" I thought the minute I clapped eyes on my son's bride coming down the Pullman steps. "Can't boil water, I bet!" It made me sick, Donnie meeting Paula on that cruise down South and marrying her. I'd had Nan Blaine here at home all picked out for him. Nan can cook,

WELL, SHE AND DONNIE got to housekeeping. And right afterwards was our church's annual Cake Sociable. Paula, brash as anything, promised a chocolate cake. "I hate to think what it'll be like!" I told my married daughter, Minnie. "I guess our family's going to have to eat crow before all those folks!"



**BUT I GOT MY COME-UPPANCE, ALL RIGHT!**  
Because Paula's chocolate cake beat my cake, and Minnie's and Nan Blaine's all hollow! It was a new kind, with a custard filling—sort of a cross between Fudge Cake and Boston Cream Pie. The most delicious thing! Folks just went crazy over it!

**AND PAULA WAS REAL MODEST.** "I couldn't have made such a rich-colored, rich-tasting cake without Baker's Chocolate," she said. "It takes the richness of Baker's Chocolate, my mother always told me, to give frostings such smooth, satiny gloss and cakes such *real chocolate flavor!*" And says I, "Paula, your mother brought you up right. And I tell you we're proud to have you in our family!"



Copyright, General Foods Corp., 1939

## COCOA, TOO! FOR EXTRA-RICH, SMOOTH FLAVOR, TASTE BAKER'S!

The quality of Baker's Cocoa has been famous for generations. Since 1780 it has always been the aristocrat, the luxury cocoa, of America. Yet today this fine cocoa is far from luxury-priced. The money you save by ordering Baker's in the pound-size can makes it amazingly economical. Try Baker's Cocoa in the pound can this week! Enjoy its delicious richness!



*Free!*



GIVING A PARTY? SEND FOR THIS SMART NEW BOOK TODAY!

Just off the press—a "Party Book" of rich chocolate foods for every jolly occasion on the calendar! 28 illustrated pages—59 recipes carefully tested for you at our chocolate headquarters. Yours free! Just mail this coupon today to—GENERAL FOODS, BATTLE CREEK, MICH.

Your name \_\_\_\_\_  
Street \_\_\_\_\_  
City \_\_\_\_\_ State \_\_\_\_\_

(If you live in Canada, address General Foods, Ltd., Cobourg, Ont.) (Offer expires Dec. 1, 1939.)



*Lou Sloan (center), engineer on the great All-American Canal, pauses to enjoy a Camel, the cigarette he calls "the best-tasting and mellowest I know."*

## "FOR SMOKING PLEASURE AT ITS BEST LET UP—LIGHT UP A CAMEL!"

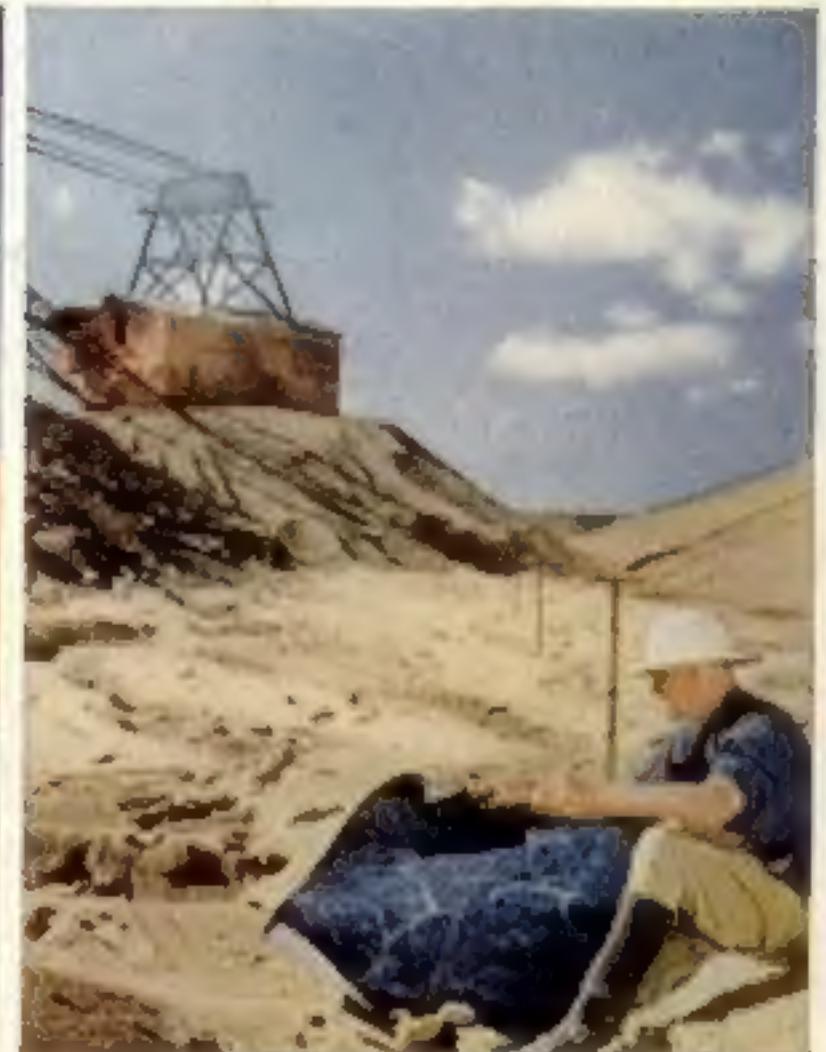
L. R. SLOAN, JR., IRRIGATION ENGINEER



**1** LOU SLOAN'S tough job is engineering an important link in the All-American Canal that winds over the desert from the Colorado River to California's Imperial and Coachella Valleys. Lou says: "Out here, where the heat hits 120 degrees, it's mighty pleasant to LET UP—LIGHT UP A CAMEL."

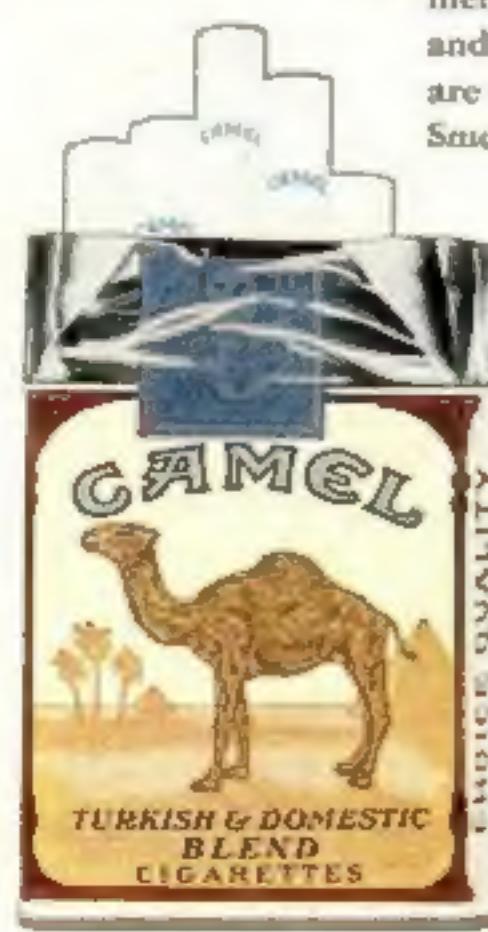


**2** THIS HISTORIC PICTURE shows Lou Sloan on the All-American Canal cut, directing a "drag line"—a giant crane and shovel that grabs up 25 tons of dirt per scoop. Men in this barren country work like pioneers—find few high-spots in life. So Lou and most of his fellow workers are grateful for the true smoking enjoyment they get from Camels. "I like Camel's mellow mildness and delicate flavor," says Lou. "True mildness" and "flavor" are words that Camels put into many a smoker's mouth. Smokers enjoy Camels more because there's more to a Camel.



**3** PLANNING to speed the Canal's desert conquest. Grappling with knotty problems in a withering climate, engineer Sloan finds each mellow, cheering Camel a good friend indeed. He says: "I'd walk a mile for a Camel! any time!" And Lou finds Camels uniformly good—always mellow and delightful.

"Mild as a Camel" is a Camel smoker's way of describing anything that is mellow and smooth. Such a cigarette is worth trying. Decide now to smoke 6 packs of Camels. Learn why they are the largest-selling cigarette in America—a matchless blend of finer, MORE EXPENSIVE TOBACCOES—Turkish and Domestic.



FOR SMOKING PLEASURE  
AT ITS BEST—

**CAMEL...**

THE CIGARETTE OF COSTLIER TOBACCOES

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